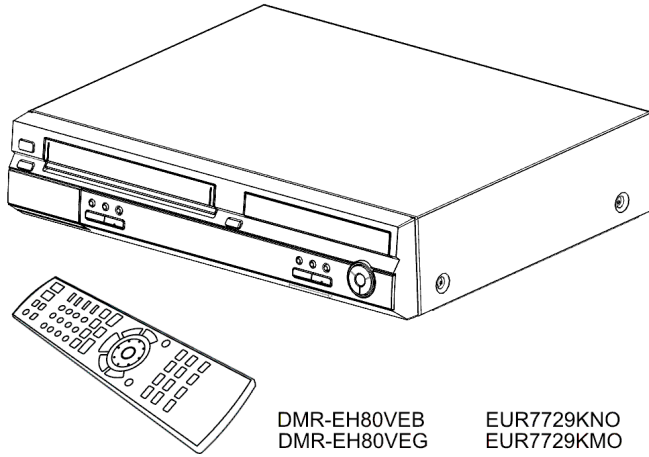


Service Manual

DVD Video Recorder



DMR-EH80VEG
DMR-EH80VEB

Vol. 1

Colour

(S).....Silver Type

DMR-EH80VEB
DMR-EH80VEG

EUR7729KNO
EUR7729KMO

Note 1:

This model's DVD Drive is VXY1872.

Note 2:

This model's VHS Mechanism is
R4-MECHANISM-CHASSIS-FOR-EURO-MODEL:
Order No. MAD0403002C2

When replacing with Digital P.C.B. or HDD,
"UNFORMAT" indication is displayed and HDD
must be formatted.

After that, **programme in the HDD will be lost.**

In detail, please refer to each content in this
service manual.

Panasonic

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SPECIFICATIONS

| | |
|---|--|
| Power supply: | AC220-240 V, 50/60 Hz |
| Power consumption: | 46W +/-1,3W Power Save mode: 5W+/-0,4W |
| Dimensions and Mass: | 430 (W)×380 (D)×89 (H) mm (excluding protrusions) / 7kg |
| Operating temperature range: | +5 to +40°C |
| Operating humidity range: | 35 to 80% RH (no condensation) |
| Pickup: | Laser power and Wave length: CLASS2/CLASS1 662nm / 795nm No hazardous radiation is emitted with the safety protection Laser performance: Class 3B / Class 3A (optical scan unit) |
| (NORSK) Bølgelengde: | 662nm / 795nm |
| Laserstyrke | Ingen farlig stråling sendes ut |
| Video Recording signal: | PAL MESECAM (only EG) NTSC (only from extern and DVD) |
| DVD Signal system: | PAL625/50, PAL525/60 NTSC (playback on PAL TV) |
| DVD Region number: | Region No.2 |
| Approximate Recording time (approximate): | DVD 4.7GB Disk / HDD 200GB |
| XP: 10 MBps | 1h / 44h |
| SP: 5 MBps | 2h / 89h |
| LP: 2,5 MBps | 4h / 177h |
| EP: 1,7, 1,2 MBps | 6h, 8h / 266h, 355h |
| DVD Video Recording and Playback format: | |
| Video: MPEG2 (Hybrid VBR) / Audio: Dolby Digital 2CH | |
| DVD-RAM: 12cm 4.7GB / 9.4GB / 8cm 2.8GB | |
| DVD-R: 12cm 4.7GB / 8cm 1.4GB | |
| DVD-RW: 12cm 4.7GB | |
| DVD+R: 12cm 4.7GB | |
| Only Playback format: | |
| DVD-Video, DVD-Audio, DVD+RW | |
| CD-Audio (CD-DA), Video CD, S-Video CD (IEC62107) | |
| CD-R/CD-RW (CD-DA, Video CD formatted discs) | |
| MP3 (audio), JPG (picture) | |
| Maximum number of tracks and groups: 999 tracks and 99 groups | |
| TV tuner system EB: | 1x DVD / 1x VCR UHF: CH21-CH68 VHF (OIRT): CHR1-CHR12 |
| TV tuner system EG: | 1x DVD / 1x VCR VHF: CH E2-CH E12 A-H2 UHF: CH21-CH69 CATV: S01-S05 (S1-S3), S1-S20(M1-U10), S21-S41 |
| RF out system: | |
| DMR-EH80V EB | UHF: CH21-CH68 (71 +/-3dBμ, 75Ω close) |
| DMR-EH80V EG | without RF converter |
| Video Recording system: | 4 rotary heads (helical scanning system) |
| Video heads: | 4 rotary video heads 2 audio HIFI heads 1 audio head (normal audio) |
| Video input: | |
| EURO AV (AV1 / AV2) | 21 pin connector (1.0Vp-p, 75Ω terminated) |
| VIDEO IN (AV3 front input) | cinch connector (1.0Vp-p, 75Ω terminated) |
| S-VIDEO IN | Y: 1Vp-p, C: 0.3 Vp-p (PAL-Burst) |
| DV input IEEE1394 | 4pin PAL/NTSC |
| SD Card slot: | Still picture (JPEG, TIFF) SD Memory Card, MultiMediaCard Format: FAT12, FAT16 |
| Video output: | |
| EURO AV (AV1 / AV2) | 21 pin connector (1.0Vp-p, 75Ω terminated) |
| VHS / DVD | 1x cinch (1.0Vp-p, 75Ω terminated) |
| DVD (only) component | 3x cinch Progressive / Interlace (Y: 1.0Vp-p, PB: 0.7Vp-p, PR: 0.7Vp-p) |
| S-VIDEO | Y (1.0Vp-p, 75Ω terminated) C PAL (0.3Vp-p, 75Ω terminated) C NTSC (0.286 Vp-p, 75Ω terminated) |

| | |
|---|--|
| DVD RGB video output: | |
| RGB output level: | 0.7 Vp-p (75Ω) +/-10% |
| Output terminal: | AV (21pin) |
| Number of terminals: | 1 system |
| Audio heads: | |
| 1 stationary head | Mono |
| 2 channels | Hi-Fi Sound-Stereo |
| Audio input: | |
| EURO AV (AV1 / AV2) | 21 pin connector: -6dBV (500mV), more than 10kΩ |
| AUDIO IN (AV3 front input) | cinch connector: -6dBV (500mV), more than 10kΩ |
| Audio output: | |
| VHS / DVD, DVD only | cinch connector: -6dBV (500mV), less than 1kΩ |
| EURO AV (AV1 / AV2) | 21 pin connector: -6dBV (500mV), less than 1kΩ |
| DVD optical digital output | audio out (PCM, Dolby Digital, DTS, MPEG) |
| Audio characteristics: | |
| S/N ratio | Normal: more than 43dB (SP) Hi-Fi: 65dB, DVD: 115dB |
| Frequency response | Normal: 80Hz - 8kHz, Hi-Fi: 20Hz - 20kHz DVD: 4Hz - 22kHz (linear audio) 48kHz sampling DVD: 4Hz - 44kHz (linear audio) 96kHz sampling CD Audio: 4Hz - 20kHz |
| Total harmonic distortion: | CD Audio: 0.0025% |
| Dynamic range: | |
| VCR: | more than 90dB |
| DVD (linear audio): | more than 98dB |
| CD audio: | more than 96dB |
| Videotape speed and Recording time (PAL / SECAM 240min. tape): | |
| SP: | 23.39mm/s, 240min. |
| LP: | 11.695mm/s, 480min. |
| EP: | 7.796mm/s, 720min. |
| FF / REW time: | 60sec. (180min. tape) |
| Videotape speed and Recording time (NTSC 240min. tape): | |
| SP: | 33.35mm/s, 168min. |
| EP: | 11.12mm/s, 505min. |
| Winding Speed (180min tape): | |
| | FF time approximate 60sec. REW time approximate 43sec. |

Note:
Specifications are subject to change without notice.
Mass and dimensions are approximate.

MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

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■ **Built-in decoders**
You can play discs with these symbols.



⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 INTRODUCTION

This service manual contains technical information which will allow service personnel to understand and service these models.

Please place orders using the parts list and not the drawing reference numbers.

1. This service manual does not contain the following information, because of the impossibility of servicing at component level.
 - Schematic Diagram, Block Diagram and P.C.B. layout of Digital P.C.B.
 - Parts List for individual parts of Digital P.C.B.
 - Exploded View and Parts List for individual parts of RAM drive.
2. The following categories are recycling module part. Please send them to Central Repair Center.
 - Digital P.C.B.:
DMR-EH80VEB: RFKBEH80VEB
DMR-EH80VEG: VEP79108E
 - RAM Drive: VXY1872
3. If the circuit is changed or modified, this information will be followed by supplement service manual to be filed with original service manual.
4. Adjustment procedures, Disassembly Procedures and Assembly Procedures for VCR Mechanism Chassis are separate volume from this service manual. Please refer to the service manual for R4 Mechanism Chassis for EURO model (MAD0403002C2).

2 SAFETY PRECAUTIONS

2.1. GENERAL GUIDELINES

1. Be careful during removing metal parts, sharp edges.
2. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
4. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

2.1.1. LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screw heads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between $1\text{M}\Omega$ and $5.2\text{M}\Omega$.
When the exposed metal does not have a return path to the chassis, the reading must be infinity.

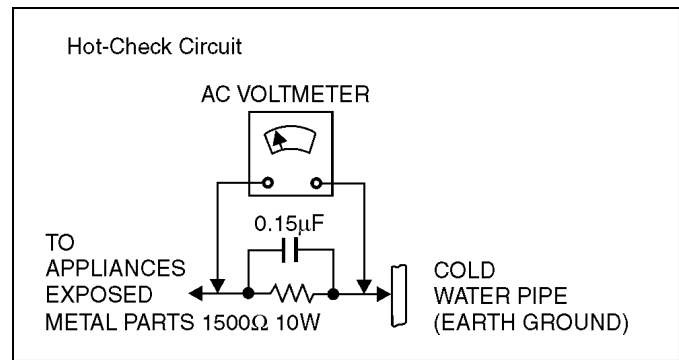


Figure 1

2.1.2. LEAKAGE CURRENT HOT CHECK

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a $1.5\text{k}\Omega$, 10 watts resistor, in parallel with a $0.15\mu\text{F}$ capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed $1/2$ milliampere. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

3 PREVENTION OF ELECTROSTATIC DISCHARGE (ESD) TO ELECTROSTATIC SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatic Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistor-sand semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device.

Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.

5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpacked replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

4 PRECAUTION OF LASER DIODE

CAUTION:

This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.
Wave length: 662 nm/795 nm
Maximum output radiation power from pickup: 100μ W/VDE.
Laser radiation from the pickup lens is safety level, but be sure the followings:

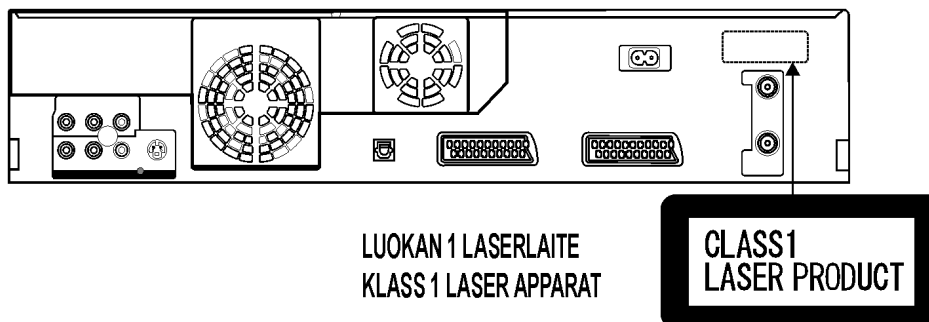
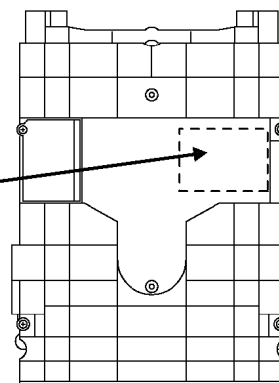
1. Do not disassemble the optical pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.

ACHTUNG:

Dieses Produkt enthält eine Laserdiode.
Im eingeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheit ausgestrahlt.
Wellenlänge: 662 nm/795 nm
Maximale Strahlungsleistung der Lasereinheit: 100μ W/VDE.
Die Strahlung der eingeschalteten Lasereinheit ist ungefährlich, wenn folgende Punkte beachtet werden:

1. Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.
2. Den werksseitig justierten Einstellregler der Lasereinheit nicht verstellen.
3. Nicht in die Fokussierlinse blicken.
4. Auch nicht mit optischen Instrumenten in die Fokussierlinse blicken.

| | | |
|-----------|--|-----------------------|
| CAUTION | - LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM. | FDA 21 CFR / Class II |
| CAUTION | - VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. | IEC60825-1 / Class 2b |
| ATTENTION | - RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU. | |
| ADVARSEL | - SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDSØG UDSÆTTELSE FOR STRÅLING. | |
| VARO! | - AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTELYLLÄ. ÄLÄ KATSO SÄTEESEEN. | |
| VARNING | - SYNIG OCH OSYNIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN. | |
| ADVARSEL | - SYNLIG OG USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNES. UNDSØG EKSPONERING FOR STRÅLEN. | |
| VORSICHT | - SICHTBARE UND UNSICHTBARE LASERSTRALUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN. | |
| 注意 | - 打开时有可见及不可见激光辐射。避免激光束照射。 | |
| 注意 | - ここを開くと可視及び不可視レーザー光が出ます。 ビームを見たり、触れたりしないで下さい。 | RGLCA0141 |



CAUTION!
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

5 ABOUT LEAD FREE SOLDER (PbF)

This model uses lead free solder (PbF). For repair use only lead free handsolder.

Caution:

Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70-F (30 - 40-C) higher. Please use a high temperature soldering iron. In case of the soldering iron with temperature control, please set it to 700 +/-20-F (370 +/-10-C). Pb free solder will tend to splash when heated too high (about 1100-F/ 600-C). When soldering or unsoldering, please completely remove all of the solder on the pins or solder area and be sure to

heat the soldering points with the Pb free solder until it melts enough.

6 PREVENTION OF STATIC ELECTRICITY DISCHARGE

The laser diode in the traverse unit (optical pickup) may brake down due to static electricity of clothes or human body. Use due caution to electrostatic breakdown when servicing and handling the laser diode.

6.1. GROUNDING FOR ELECTROSTATIC BREAKDOWN PREVENTION

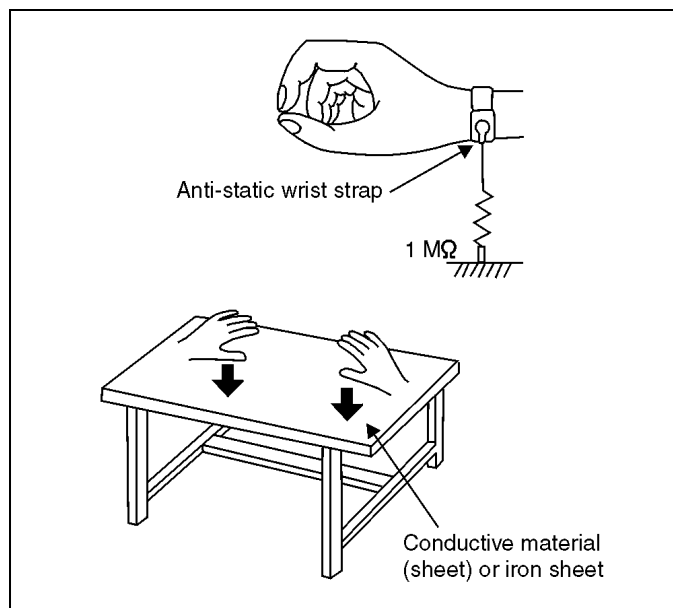
Some devices are using the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

6.1.1. WORKTABLE GROUNDING

1. Put a conductive material (sheet) or iron sheet on the area where the optical pickup is placed, and ground the sheet.

6.1.2. HUMAN BODY GROUNDING

1. Use the anti-static wrist strap to discharge the static electricity from your body.



6.1.3. HANDLING OF OPTICAL PICKUP

1. To keep the good quality of the optical pickup maintenance parts during transportation and before installation, the both ends of the laser diode are short-circuit. After replacing the parts with new ones, remove the short circuit according to the correct procedure.
2. Do not use a tester to check the laser diode for the optical pickup. Failure to do so will damage the laser diode due to the power supply in the tester.

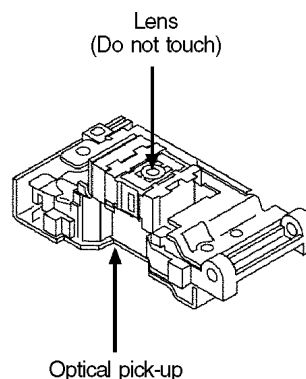
6.2. HANDLING PRECAUTIONS FOR OPTICAL PICK-UP UNIT

The laser diode in the optical pick-up unit may break down due to potential difference caused by static electricity of clothes or human body.

So be careful of electrostatic breakdown during repair of the optical pick-up unit.

6.2.1. HANDLING OF OPTICAL PICK-UP UNIT

1. The optical pick-up unit has high precision extremely sensitive structure. Be careful not to apply excessive shock.



7 GENERAL DESCRIPTION

VCR, DVD and HD Controls

DVD/VHS



Stand-by/on switch

Press to switch the unit from on to stand-by mode or vice versa. In stand-by mode, the unit is still consuming a small amount of power.



Direct TV record to DVD or HDD.

Buttons to switch between VHS, HDD, DVD and SD.



Press the corresponding button to operate the desired element.

The unit is switched on from electrical standby mode.



Launch the GUIDE Plus+ system.



Smart Wheel: Press up, down, left or right to select the Function in the menu. Rotate the wheel to select the parameter.

ENTER: Select or save a setting.

Still picture or time loop playback.



Display the programme information from the GUIDE Plus+ system.

SUB MENU



Launch DVD sub-menus.



Time and detail information appears on the screen.

GUIDE Plus+ menu: GREEN - Forward 24 hours.

INPUT SELECT



Switch button of the AV input between AV1, AV2 and AV3 (front) / TP (DVD) and DC (VHS), AV4, DV.

CANCEL/RESET



VHS - Reset the tape counter.



ShowView menu



VIDEO Plus+ EB Model



SLOW/SEARCH: DVD - Search or slow motion playback.

REW/FF: VHS - Fast forward or rewind from stop mode. Forward or reverse scene search during playback mode.



Stops recording, replay or forward/reverse action. Press and hold more than 3 seconds to remove cassette.



Pause a recording or playback.



Start the recording.



Switch timer on and off.



Record with external recording control.



DUBBING menu

EJECT Front Panel Button: Remove cassette

OPEN/CLOSE Front Panel Button: Open and close the disc tray

DRIVE SELECT Front Panel Button: Selection HDD, DVD, SD

TV



Turn the television set on and off.



Select the AV input on the television set.



CH: Select the channel on the television set.



VOLUME: Volume control of the television set.



Number buttons - direct input

VCD 5: 0 + 5 15: 1 + 5

MP3/JPEG 5: 0 + 0 + 5 15: 0 + 1 + 5



DIRECT NAVIGATOR TITLE VIEW

TOPMENU: Main menu of DVD video.



FUNCTION selection menu.



TIMER RECORDING menu.



Exit a menu.



Launch the disc menu.

GUIDE Plus+ menu: RED - Back 24 hours.



TIME SLIP: DVD - Select the timeframe to be skipped.

JET REW: VHS - Fast rewind to the beginning of the cassette.



CH: Channel select button.

TRACKING/V.LOCK + / -
VHS - Optimisation of the playback picture.



DVD - Depending on the disc, select the audio channel and or the sound track.

VHS - Press several times to select sound playback mode.



SKIP: DVD - Skip chapters, titles, or pictures.

INDEX: VHS - Search for the beginning of a recording.



Starts playback.

PLAY/ x1.3

HDD / RAM - You can increase the playback speed

Hold **PLAY** during playback.



Record mode button DVD - XP, SP, LP, EP

Record mode button VHS - SP, LP, EP



DVD - Jumps forward 30 seconds.



Erase a title or a chapter.

GUIDE Plus+ menu: BLUE - Programme Type selection.



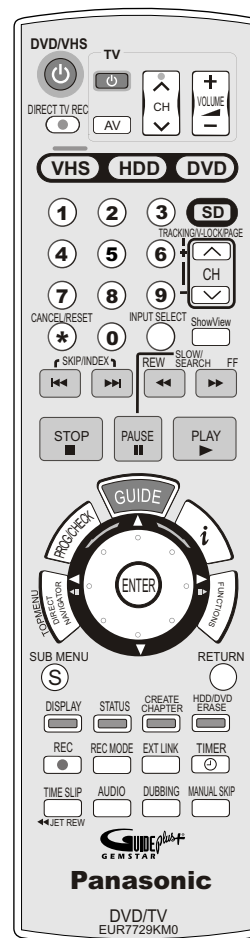
Split the recording into chapters.



VHS/DVD EXT LINK Front Panel Button: Recording with external recording control



Front Panel Button: One Touch Dubbing (HD, DVD, TAPE)



8 NEW FEATURES

8.1. QUICK START FUNCTION (REC)

(Note: Descriptions concerning HDD is applied only to models with HDD.)

1. General

A few seconds after tuning on the unit, you can start recording to DVD-RAM, HDD.

You can switch the operation of this function (ON/OFF) on the menu screen.

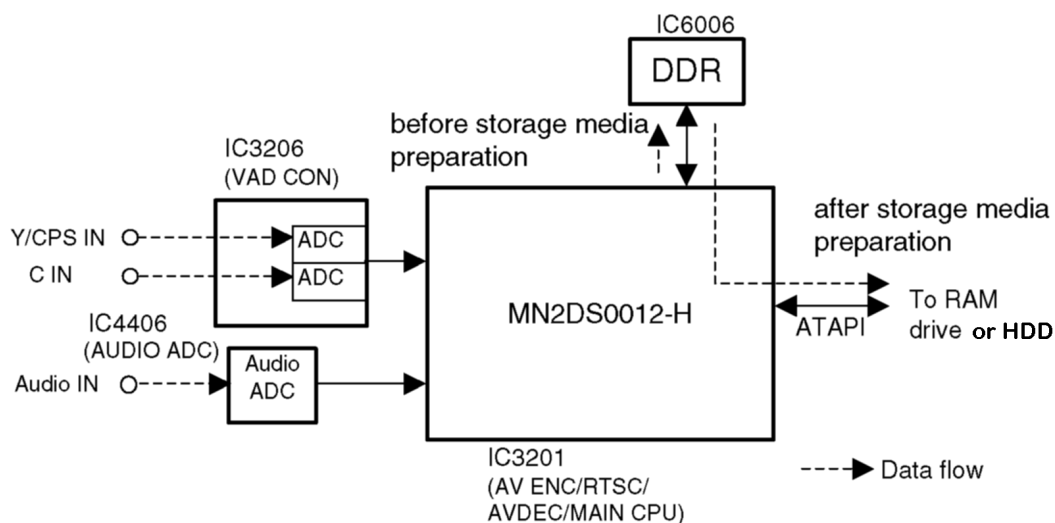
2. Quick start (REC) principle

In the power-off at Quick start, only power supplies for video IC, tuner and storage media are cut off.

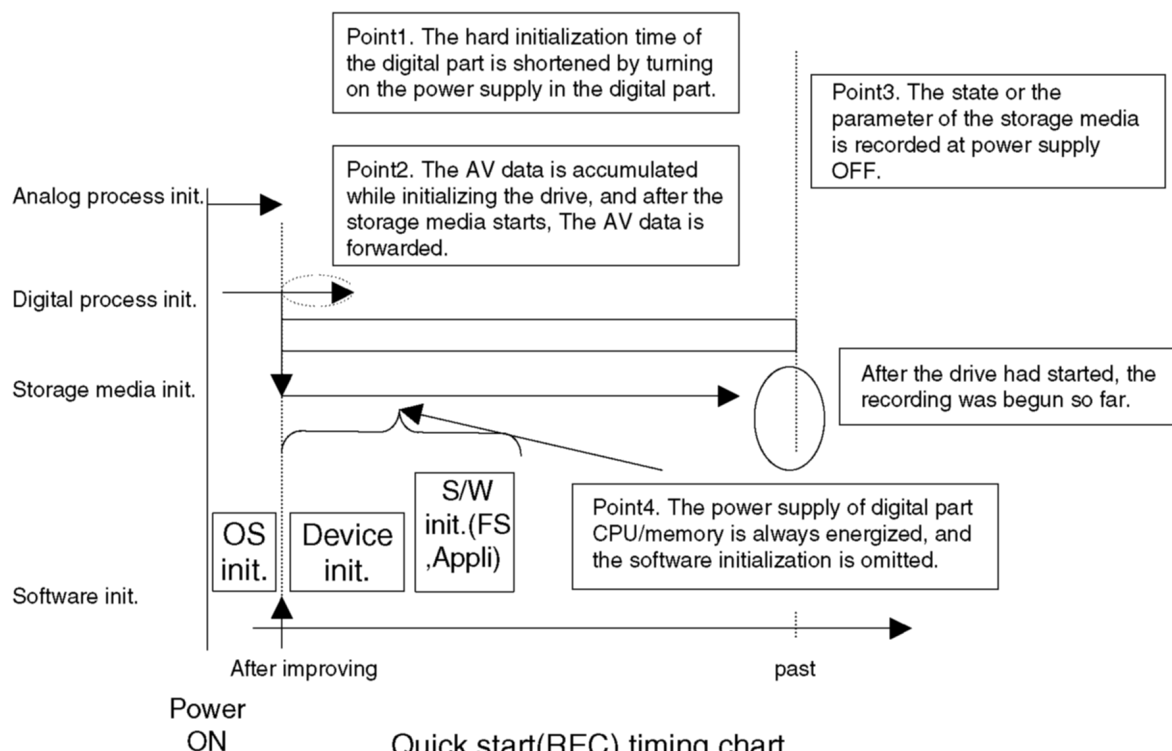
- 2.1. When the REC button is pushed a few second after the power button is pushed, Audio and Video data are stored in DDR SDRAM before a storage media (DVD-RAM or HDD) preparation.

*Preparation time → DVD-RAM: About 8 seconds

- 2.2. After a storage media DVD-RAM or HDD preparation, Audio and Video data are transferred from DDR SDRAM to the storage media.



Quick start(REC) explanation chart



Quick start(REC) timing chart

9 (DVD) TAKING OUT THE DISC FROM RAM-DRIVE UNIT WHEN THE DISC CANNOT BE EJECTED BY BUTTON

9.1. (DVD) FORCIBLE DISC EJECT

9.1.1. (DVD) WHEN THE POWER CAN BE TURNED OFF.

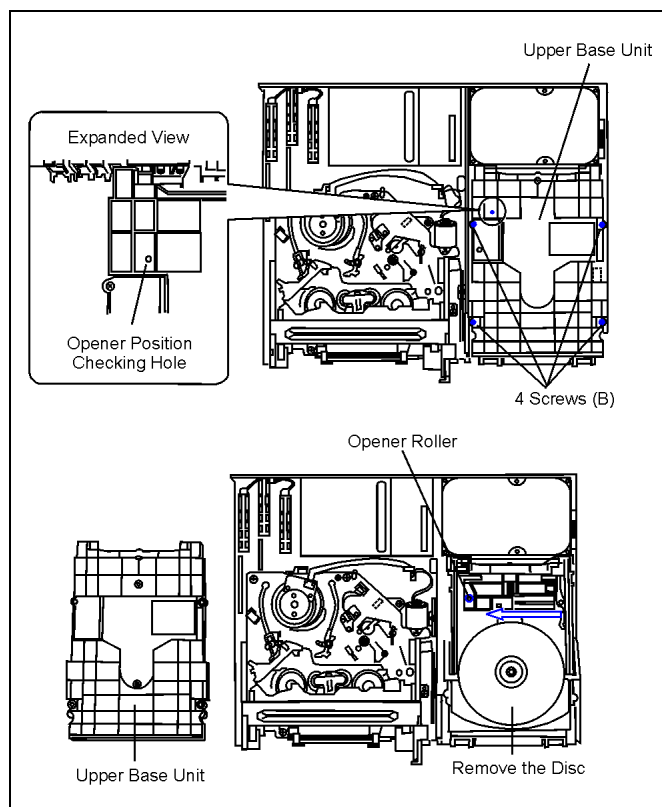
1. Turn off the power and press [(DVD) STOP], [(DVD) CH UP] keys on the front panel simultaneously for 5 seconds.

9.1.2. (DVD) WHEN THE POWER CAN NOT BE TURNED OFF.

1. Press [POWER] key on the front panel for over 10 seconds to turn off the power forcibly and press [(DVD) STOP] [(DVD) CH UP] keys on the front panel simultaneously for 5 seconds.

9.2. (DVD) WHEN THE FORCIBLE DISC EJECT CAN NOT BE DONE.

1. Turn off the power and pull out AC cord.
2. Remove the Top Case.
3. Remove the Front Panel.
4. Remove 4 screws (B) and Upper Base Unit from DVD-RAM Drive.
5. Take out the disc and put the Opener Roller on fully position for direction of Arrow.
6. Put the Upper Base Unit so that the Opener Roller is inserted into the groove.
7. Check center of Opener Roller is seen through the Opener position Checking Hole, and tighten 4 screws (B).



10 (VHS) REMOVING OF CASSETTE TAPE

When the cassette tape could not be removed after an electrical malfunction, there are 2 ways to remove a cassette tape.

10.1. (VHS) REMOVAL BY COMPULSORY UNLOADING.

If Service Mode can be activated when the power can not be turned on, this operation is able.

1. Press [FF] and [EJECT] button simultaneously for more than 3 seconds and set the Service Mode to 7.
2. Press [STOP] button in order to unload the mechanism. (Pay attention to tape slack)

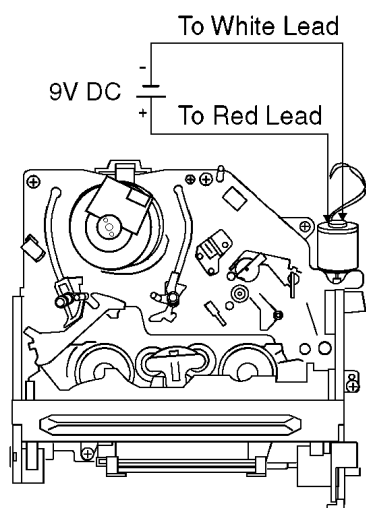
Service Mode Display:

7 *** (STOP) → 7 0L ** (EJECT)

10.2. (VHS) REMOVAL BY MANUAL OPERATION.

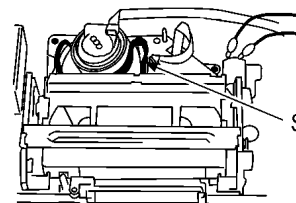
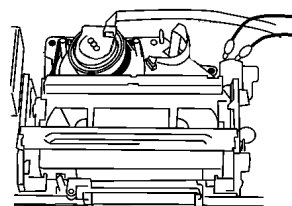
1. Disconnect the AC plug, and remove the Top Panel and the Front Panel by referring to the Disassembly Procedures.
2. Connect a batterie (9V spec.) to the Loading Motor in series for supplying 9V to rotate the Loading Motor.

CONNECTION for UNLOADING

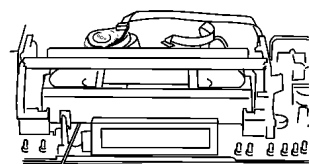


3. Stop unloading just before unloading will be completed. The tape becomes slack.

4. Rotate the S-Reel by a small minus screwdriver to remove the slack tape.

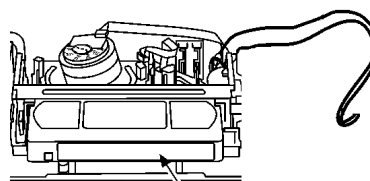


Slack of Tape



Minus Screw Driver (Small)

5. Then unload again to remove the cassette tape.

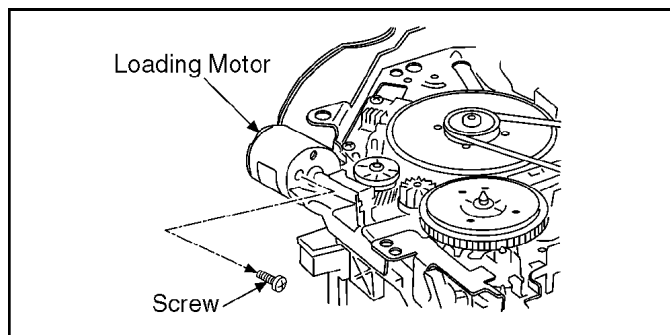


Cassette Tape

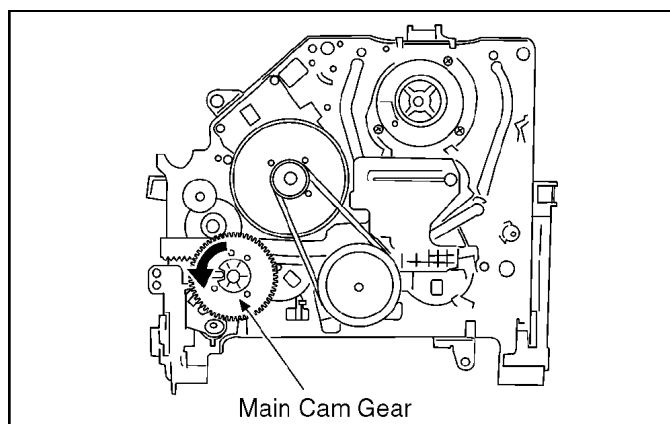
10.3. (VHS) TAKE OUT CASSETTE TAPE MANUALLY AFTER REMOVING THE MECHANISM

1. Disconnect the AC plug, and remove the Top Panel, Front Panel and the Mechanism by referring assembling and disassembling description.

2. Remove the Screw and remove the Loading Motor.

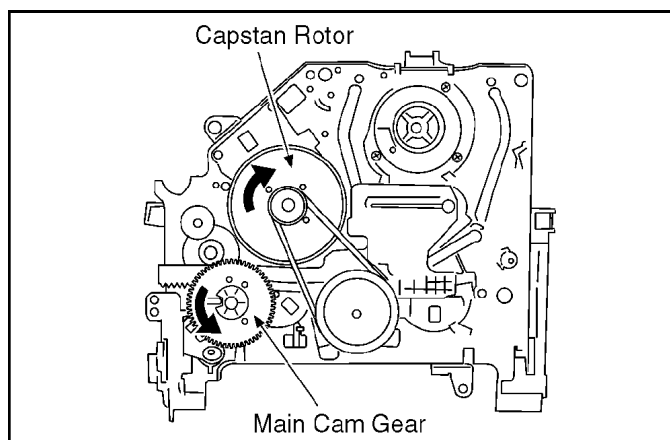


3. Rotate the Main Cam Gear counter-clockwise until just before the unloading will be completed.



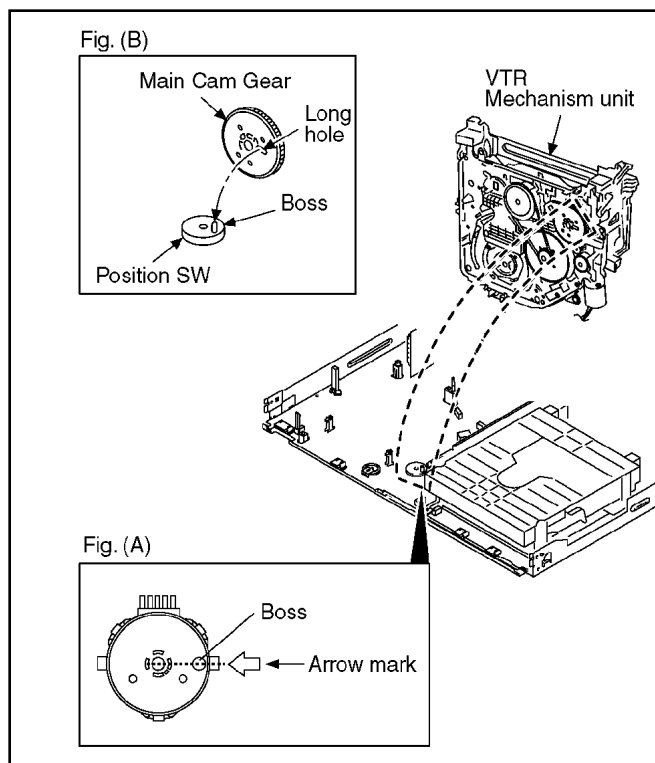
4. Rotate the Capstan Motor clockwise to remove the slack tape.

5. Rotate the Main Cam Gear counter-clockwise again to remove the cassette-tape.



6. Attach Loading Motor and tighten the screw.

7. Set the Position Switch to EJECT POSITION certainly and attach the mechanism to chassis.



11 (DVD) SERVICE EXPLORER

Confirm “RAM-Drive Last Error” in Service Mode

Execute Service Mode

1. When the power is off, press [DVD DUBBING], [OPEN/CLOSE] and [STOP] keys simultaneously for 5 seconds.

FL Display:

SERV

*After finishing display “(7). Factor of Drive Error occurring”, press [0] [2] ~[1] [9] keys of the Remote Controller so that 19 memories can be displayed as maximum.

2. Press [4] [2] keys of remote controller.

Example of FL Display:

- (1) Error Number is displayed for 5 seconds.

NO 01

- (2) Time when the error has occurred is displayed for 5 seconds.

502161915

- (3) Last Drive Error (1/2) is displayed for 5 seconds.

031000

Error
Sense Key

00: Bad disc
03: Bad disc
04: Bad disc or RAM-Drive malfunction

When above error codes are displayed, confirm operation with Panasonic RAM disc or Panasonic DVD-R disc.

*** If the operation is OK, judge the error is due to media.**

*** If the operation is NG and symptom as BLOCK NOISES and so on, that are particular symptom of Digital appears, judge the error is due to RAM-Drive or Digital P.C.B. .**

- (4) Last Drive Error (2/2) is displayed for 5 seconds.

00130000

- (5) Error occurring Disc type is displayed for 5 seconds.

DVDR

Disc type

* The error disc cannot be specified, display as “DVD”.

- (6) Disc Maker’s ID is displayed for 5 seconds.

mxLR061

Example of Disc Maker's ID:

DVD-R Disc

| No. | FL Display (Disc Maker's ID) | Disc Maker | Country |
|-----|------------------------------|---------------------------------|-------------|
| 1 | MEI | Panasonic | Japan |
| 2 | PVC | Pioneer | Japan |
| 3 | MCC | Mitsubishi Chemical Corporation | Japan |
| 4 | TDK | TDK | Japan |
| 5 | MXL | Maxell | Japan |
| 6 | MCI | MITUI CHEMICALS | Japan |
| 7 | JVC | Victor JVC | Japan |
| 8 | TAIYOYUDEN | Taiyo yuden | Japan |
| | TYG | | |
| 9 | GSC | Giga Storage | Taiwan |
| 10 | PRODISC | Prodisc | Taiwan |
| 11 | PRINCO | PRINCO | Taiwan |
| 12 | RITEK | RITEK | Taiwan |
| 13 | OPTDISC | OPTDISC | Taiwan |
| 14 | LEAD DATA | LEAD DATA | Taiwan |
| 15 | CMC | CMC | Taiwan |
| 16 | AUVISTAR | AUVISTAR | Taiwan |
| 17 | ACER | Acer | Taiwan |
| 18 | VIVASTAR | VIVASTAR | Switzerland |
| 19 | LGE | LG Electronics | Korea |

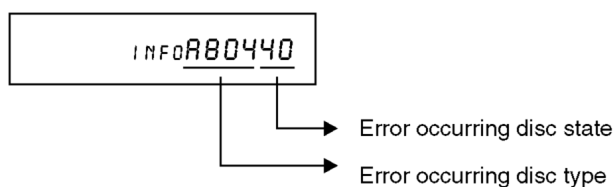
DVD-RAM Disc

| No. | FL Display (Disc Maker's ID) | Disc Maker | Country |
|-----|------------------------------|------------|---------|
| 1 | MEI | Panasonic | |
| 2 | MATSUSHITA | Panasonic | Japan |
| 3 | MXL | Maxell | Japan |
| 4 | PRODISC | Prodisc | Taiwan |
| 5 | OPTDISC | OPTDISC | Taiwan |
| 6 | CMC | CMC | Taiwan |

*Since an display is arbitrarily set up by the disc producer side, the above-mentioned display may be changed.

Please make it reference as an example of a display.

(7) Factor of Drive Error occurring is left displayed



Error Occurring Disc Type

| FL Display | Disc Type |
|------------|---------------|
| 00 | DVD-ROM/Video |
| 01 | Audio-CD |
| 02 | 2.6GB DVD-RAM |
| 03 | 4.7GB DVD-RAM |
| 04 | DVD-R |

Error Occurring Disc State

| FL Displays (Hexadecimal) | Description | | | |
|------------------------------|------------------------|----------------------|--------------------------|-----------|
| | Disc distinction state | Cartridge disc state | Cartridge disc state | Disc size |
| 00 | OK | With cartridge | Has not been opened yet. | 12 cm |
| 10 | OK | With cartridge | Has not been opened yet. | 8 cm |
| 20 | OK | With cartridge | Has been opened. | 12 cm |
| 30 | OK | With cartridge | Has been opened. | 8 cm |
| 40 | OK | Bare | Has not been opened yet. | 12 cm |
| 50 | OK | Bare | Has not been opened yet. | 8 cm |
| 60 | OK | Bare | Has been opened. | 12 cm |
| 70 | OK | Bare | Has been opened. | 8 cm |
| 80 | NG | With cartridge | Has not been opened yet. | 12 cm |
| 90 | NG | With cartridge | Has not been opened yet. | 8 cm |
| A0 | NG | With cartridge | Has been opened. | 12 cm |
| B0 | NG | With cartridge | Has been opened. | 8 cm |
| C0 | NG | Bare | Has not been opened yet. | 12 cm |
| D0 | NG | Bare | Has not been opened yet. | 8 cm |
| E0 | NG | Bare | Has been opened. | 12 cm |
| F0 | NG | Bare | Has been opened. | 8 cm |

12 (DVD) SELF-DIAGNOSIS AND SPECIAL MODE SETTING

12.1. (DVD) SELF-DIAGNOSIS FUNCTIONS

Self-Diagnosis Function provides information for errors to service personnel by "Self-Diagnosis Display" when any error has occurred.


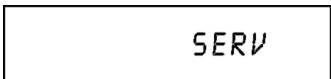
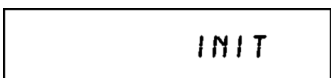

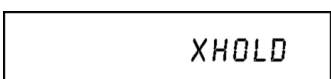

U**, **H**** and **F**** are stored in memory and held.

Display on FL will be cancelled when the power is turned off or AC input is turned off during self-diagnosis display is ON.

| Error Code | Diagnosis contents | Description | Monitor Display | FL display |
|------------|---|---|-----------------|--|
| U30 | Remote control code error | Display appears when main unit and remote controller codes are not matched. | No display | <div>REMOTE MODE **</div> <p>"**" is remote controller code of the main unit. Display for 5 seconds.</p> |
| U59 | Abnormal inner temperature detected | Display appears when the drive temperature exceeds 70°C. The power is turned off forcibly. For 30 minutes after this, all key entries are disabled. (Fan motor operates at the highest speed for the first 5 minutes. For the remaining 25 minutes, fan motor is also stopped.) The event is saved in memory as well. | No display | <div>U59</div> <p>"U59" is displayed for 30 minutes.</p> |
| U80 | ST Microprocessor Communication Error on Timer Bus | Displayed appears when ST Microprocessor Communication Error on Timer Bus occurs. | No display | <div>U80</div> <p>"U80" is displayed till Power Key is pressed.</p> |
| U81 | ST Microprocessor Communication Error on UART | Displayed appears when ST Microprocessor Communication Error on UART occurs. | No display | <div>U81</div> <p>"U81" is displayed till Power Key is pressed.</p> |
| U99 | Hang-up | Displayed when communication error has occurred between Main microprocessor and Timer microprocessor. | No display | <div>U99</div> <p>Displayed is left until the [POWER] key is pressed.</p> |
| H19 | Inoperative fan motor | Display appears when inoperative fan motor is detected after powered on. The power is turned off when detecting. | No display | No display |
| F00 | No error information | Initial setting for error code in memory (Error code Initialization is possible with error code initialization and main unit initialization.) | No display | No display |
| F09 | Serial Communication Error between VHS Microprocessor and Timer Microprocessor | Please confirm Serial Communication terminal of Microprocessor. Note: If F09 appears just after updating Firmware, pull off and insert AC plug, then it will disappear | No display | <div>F09</div> |
| F34 | Initialization error when main microprocessor is started up for program recording | Display appears when initialization error is detected after starting up main microprocessor for program recording. The event is saved in memory. The power is turned off when detecting. | No display | No display |
| F58 | Drive hardware error | Display appears when drive unit error is detected. The event is saved in memory. | No display | No display |
| F60 | DVD module has not been started. | Defect of Digital P.C.B. . Mode: No change | No display | <div>F60</div> |

| Error Code | Diagnosis contents | Description | Monitor Display | FL display |
|--------------|--------------------------------|---|--|--|
| UN-SUPPORT | Unsupported disc error | *An unsupported format disc was played, although the drive starts normally. *The data format is not supported, although the media type is supported. *Exceptionally in case of the disc is dirty. | "This disc is incompatible." | <div>UNSUPPORT</div> <div>Display for 5 seconds.</div> |
| NO READ | Disc read error | *A disc is flawed or dirty. *A poor quality failed to start. *The track information could not be read. | "Cannot read. Please check the disc." | <div>NO READ</div> |
| HARD ERR | Drive error | The drive detected a hard error. | "DVD drive error." | <div>Display for 5 seconds.</div> <div>HARD ERR</div> |
| HDD NG | HDD is NG | HDD is NG. Please replace HDD. | No display | <div>HDD NG</div> |
| SELF CHECK | Restoration operation | Since the power cord fell out during a power failure or operation, it is under restoration operation. *It will OK, if a display disappears automatically. If a display does not disappear, there is the possibility that defective Digital P.C.B. / RAM drive. | No display | <div>SELF CHECK</div> |
| Full Program | 16 programs are already set. | 16 programs are already set. | No display | <div>PROG FULL</div> |
| UN-FORMAT | The disc is not formatted | You have inserted an unformatted DVD-RAM or DVD-RW that is unformatted or recorded on other equipment. If you will use this disc, format is necessary. But, all program recorded on this disc will be deleted. | Format: This disc is not formatted properly. Format the disc in DISC MANAGEMENT? | <div>UNFORMAT</div> |
| PLEASE WAIT | Unit is in termination process | Unit is in termination process now. "BYE" is displayed and power will be turned off. In case "Quick Start" of setup menu is ON, it is displayed in restoration operation for AC off. | No display | <div>PLEASE WAIT</div> |

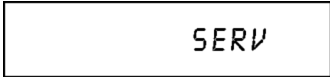



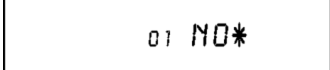
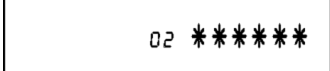

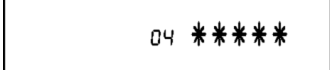
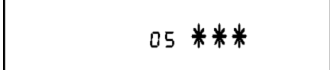
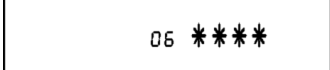
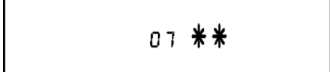
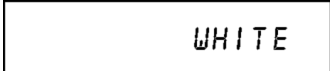
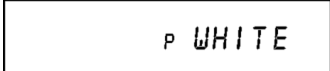
12.2. (DVD) SPECIAL MODES SETTING

| Item | | FL display | Key operation |
|------------------------|---|---|---|
| Mode name | Description | | Front Key |
| TEST Mode | *All the main unit's parameters (include tuner) are initialized. |  | Press [VHS to DVD DUBBING], [OPEN/CLOSE] and [(DVD)REC] keys simultaneously for five seconds when power is off. |
| Service Mode | Setting every kind of modes for servicing. *Details are described in "(DVD) Service Mode". |  | When the power is off, press [VHS to DVD DUBBING], [OPEN/CLOSE] and [(DVD) STOP] keys simultaneously for 5 seconds. |
| Rating password | The audiovisual level setting password is initialized to "Level 8". |  | While the tray is open, press [(DVD) REC] and [(DVD) PLAY] simultaneously for five seconds. |
| Forced disc eject | Removing a disc that cannot be ejected. The tray will open and unit will shift to P-off mode. *When Timer REC is ON or EXT-LINK is ON, execute "Forced disc eject" after releasing TimerREC or EXT-LINK. *This command is not effective during "Child lock" is ON. If this command was executed while TIMER REC is being set, TIMER REC setting will turn to OFF. | The display before execution leaves.  | When the power is off, press [(DVD) STOP] and [(DVD) CH UP] keys simultaneously for five seconds. |
| Child lock/unlock | Set or release "Child Lock". |  | Press [ENTER] and [RETURN] by remote controller simultaneously until [X-HOLD] is displayed. |
| NTSC/PAL system select | To switch PAL/ NTSC alternately. | The display before execution leaves.  | When the power is on (E-E mode), press [DVD STOP] and [OPEN/CLOSE] simultaneously for five seconds. |
| Forced power-off | When the power button is not effective while power is ON, turn off the power forcibly. *When Timer REC is ON, execute "Forced Power-off" after releasing Timer REC or EXT-LINK. Action: The tray will open, and the power will turn off. | Display in P-off mode. | Press [Power] key over than 10 seconds. |
| Aging | Perform sequence of modes as * Aging Description shown below continually. Caution: All programs in HDD and DVD-RAM disc will be deleted because Formatting is done once in Aging process. | Display following the then mode. | When the power is ON, press [STOP], [POWER] and [OPEN/CLOSE] simultaneously for over 5 seconds and less than 10 seconds. NOTE1: If Unit has not turned into Aging mode by operations shown above, execute TEST MODE once and re-execute operation shown above. (*All the main unit's parameters include tuner are initialized by TEST mode.) NOTE2: If the unit has hung-up because of pressing keys for over 10 seconds, once turn off the power, and re-execute this command. *When releasing Aging mode, press [POWER] key. |

| Item | | FL display | Key operation |
|--|---|---|---|
| Mode name | Description | Front Key | |
| Aging Contents (Example): | | | |
| <div><div><div>At start, and in the case that the memory remainder of HDD are 0</div><div>Format (DVD)</div><div>At start, and in the case that the memory remainder of DVD only are 0</div><div>REC & PLAY (HDD)</div><div>At start, and in the case that the memory remainder of HDD are 0</div><div>Format (HDD)</div><div>REC & PLAY (HDD) → REC (HDD) & PLAY (DVD) *3</div><div>REC & PLAY (DVD)</div><div>REC (HDD) & PLAY (DVD) *1</div><div>REC (DVD) & PLAY (HDD) *2</div><div>If the memory remainder of DVD,HDD are 0</div></div><div><p>*1 : REC (HDD) & PLAY (DVD) content of operation HDD→REC, DVD→PLAY, CUE, REV, PLAY, PAUSE, SLOW, R-SLOW, PLAY, PROGRAM NAVI</p><p>*2 : REC (DVD) & PLAY (HDD) content of operation DVD→REC, HDD→PLAY, CUE, REV, PLAY, PAUSE, SLOW, R-SLOW, PLAY, PROGRAM NAVI, TRAY OPEN/CLOSE</p><p>*3 : REC & PLAY (HDD)→REC (HDD) & PLAY (DVD) content of operation HDD→REC & PLAY, DVD→PLAY, TRAY OPEN/CLOSE</p></div></div> | | | |
| Demonstration lock/unlock | Ejection of the disc is prohibited. The lock setting is effective until unlocking the tray and not released by “Main unit initialization” of service mode. | <div>*When lock the tray.</div> <div>LOCK</div> <div>“LOCK” is displayed for 3 seconds.</div> | When the power is on, press [(DVD) STOP] and [POWER] keys simultaneously for five seconds. |
| | | <div>*When unlock the tray.</div> <div>UNLOCK</div> <div>“UNLOCK” is displayed for 3 seconds.</div> | When the power is on, press [(DVD) STOP] and [POWER] keys simultaneously for five seconds. |
| | | <div>*When pressing [OPEN/CLOSE] key while the tray is locked.</div> <div>LOCK</div> <div>Display “LOCK” for 3 seconds.</div> | Press [OPEN/CLOSE] key while the tray is locked. |
| ATP re-execution | Re-execute ATP. | <div>*****</div> | When the power is on (E-E mode), press [(DVD) CH UP] and [(DVD) CH DOWN] simultaneously for five seconds. |
| Progressive initialization | The progressive setting is initialized to Interlace. | <div>The display before execution leaves.</div> <div>*****</div> | When the power is on (E-E mode), press [VHS to DVD DUBBING] and [(DVD) STOP] simultaneously for five seconds. |

12.3. (DVD) SERVICE MODES

Service mode setting: While the power is off, press [DVD DUBBING], [OPEN/CLOSE] and [DVD STOP] keys simultaneously for five seconds.

| Item | | FL display | Key operation |
|----------------------|---|--|---|
| Mode name | Description | | (Remote controller key) |
| Release Items | Item of Service Mode executing is cancelled. |  | Press [0] [0] or [Return] in service mode. |
| Error Code Display | Last Error Code of U59/H/F held by Timer is displayed on FL. *Details are described in “(DVD) Self-Diagnosis Functions”. |  *  shows U/H/F  shows number | Press [0] [1] in service mode |
| ROM Version Display | (01)Region code, (02)MAIN firmware version, (03)TIMER firmware version, (04)DRIVE firmware version, (05)ROM correction version, (06)VHS microprocessor version are displayed on FL for five seconds per each version in order, but (07)VHS ROM correction version will be left displayed. | (01)Region code  (02)MAIN firmware version  (03)TIMER firmware version  (04)DRIVE firmware version  (05)ROM correction version+ROM Type  (06)VHS microprocessor version  (07)VHS ROM correction version  * are version displays | Press [0] [2] in service mode |
| White Picture Output | White picture is output as component Output from AV Decoder. *White picture (Saturation rate: 100%) *It is enable to switch Interlace/Progressive by “I/P Switch: [1] [4]” | *Initial mode is “Interlace”.  Switch Interlace/Progressive  | Press [1] [1] in service mode. Press [1] [4] in White Picture Output mode. *I/P are switched alternately. |

| Item | | FL display | Key operation (Remote controller key) |
|---------------------------|---|---|---|
| Mode name | Description | | |
| Magenta Picture Output | Magenta picture is output with Component Output from AV Decoder. *Magenta picture (Saturation rate: 100%) *It is enable to switch Interlace/Progressive by "I/P Switch: [1] [4]" | Initial mode is "Interlace". <div>MAGE</div> | Press [1] [2] in service mode. |
| | | Switch Interlace/Progressive <div>P MAGE</div> | Press [1] [4] in Magenta Picture Output mode. *I/P are switched alternately. |
| RTSC Return in XP (A & V) | AV1 input signal is encoded (XP), decoded (XP) and output decoded signal to external without DISC recording and DISC playback. | Initial mode: EE2/ Interlace/ XP/ Audio 48kHz <div>48 EE2 XP</div> | Press [1] [3] in service mode. |
| | | Switch Interlace/Progressive <div>48P EE2 XP</div> | Press [1] [4] in RTSC Return XP mode. *I/P are switched alternately. |
| | | Audio 44.1 kHz/ 48 kHz Switch <div>44 EE2 XP</div> | Press [2] [4] in RTSC Return XP mode. *48 kHz / 44.1 kHz are switched alternately. |
| I/P Switch | Switch Interlace and Progressive in EE mode. *Initial setting is "Interlace". *This command is effective during executing "White Picture Output", "Magenta Picture Output" and "RTSC Return in XP (A & V)" modes. | Initial mode is Interlace <div>14 SERV</div> | Press [1] [4] in I/P Switch mode. *I/P are switched alternately. |
| | | Switch Interlace/Progressive <div>14P SERV</div> | |
| Audio Mute (XTMUTE) | Check whether mute is applied normally by the timer microprocessor. | <div>T-MUTE</div> | Press [2] [1] in service mode. |
| Audio Mute (XDMUTE) | Check whether mute is applied normally by the Digital P.C.B. (GLUE IC). | <div>D-MUTE</div> | Press [2] [2] in service mode. |
| Audio Pattern Output | The audio pattern stored in the internal memory is output (Lch: 1kHz/-18dB) (Rch: 400Hz/-18dB) *Audio sound clock switching operation of DAC can be confirmed by sub command [2] [4]. | Initial mode (Audio 48kHz) <div>48 AUDIO</div> | Press [2] [3] in service mode. |
| | | Audio 44.1kHz/48kHz switching <div>44 AUDIO</div> | Press [2] [4] in Audio Pattern Output mode. *48 kHz / 44.1 kHz are switched alternately. |

| Item | | FL display | Key operation |
|----------------------------|--|--|--|
| Mode name | Description | | (Remote controller key) |
| HDD READ inspection | Perform a complete read inspection of the HDD. | <p>When the HDD is OK</p> <div>HDD RDOK</div> <p>If the HDD is defective</p> <div>HDD RDNG□○○</div> <p>□ : Judge of Forward rate. * When normal (Forward rate is 35 Mbps or more and there is no HDD error): □ is Space. * When Abnormal (Forward rate is less than 35 Mbps or HDD error existing): □ is X. ○○ : Number of what have spent time for seeking is over 100ms. * When normal: ○○ are spaces. * When Abnormal: Display Number of what have spent time fore seeking over 100 ms. However, if the number is more than 100, display [XX]. We judge it is normal that the number is less than 4.</p> | <p>Press [3] [1] in the service mode. * When canceling the checking mode while executing, do "forced power-off". Method: Press the "POWE" button more than 10 seconds.</p> |
| Laser Used Time Indiction | Check laser used time (hours) of drive. | <div>ERR *****</div> <p>●(*****) is the used time display in hour. ●Laser used time of DVD/CD in Playback/Recording mode is counted.</p> | Press [4] [1] in service mode. |
| Delete the Laser Used Time | Laser used time stored in the memory of the unit is deleted. | <div>CLR LASER</div> | Press [9] [5] in service mode. |

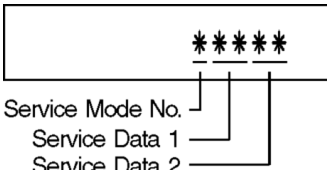
| Item | | FL display | Key operation |
|-----------------------------|--|--|--|
| Mode name | Description | | (Remote controller key) |
| RAM Drive Last Error | RAM Drive error code display. *For details about the drive error code, refer to the Service Manual for the specific RAM Drive. *Details are described in "(DVD) Service Explorer". | <p>1. Error Number is displayed for 5 seconds.</p> <div>NO **</div> <p>2. Time when the error has occurred is displayed for 5 seconds.</p> <div>YMMDDHHMM</div> <p>Y: Year MM: Month DD: Day hh: Hour mm: Minute</p> <p>3. Last Drive Error (1/2) is displayed for 5 seconds.</p> <div>*****</div> <p>4. Last Drive Error (2/2) is displayed for 5 seconds.</p> <div>*****</div> <p>5. Error occurring Disc type is displayed for 5 seconds.</p> <div>*****</div> <p>6. Disc Maker ID is displayed for 5 seconds.</p> <div>*****</div> <p>7. Factor of Drive Error occurring is left displayed</p> <div>IFO*****</div> | <p>Press [4] [2] in service mode. Then press [0] [1] ~ [9] [9], the past 99 errors are displayed.</p> <p>In case that the supplier cannot be identified, display is black out.</p> |
| Delete the Last Drive Error | Delete the Last Drive Error information stored on the DVD RAM-Drive. | <div>CLRDRIVE</div> | Press [9] [6] in service mode. |
| Turn on all FL/LEDs | All segments of FL and all LEDs are turned on. | All segments are turned on. | Press [5] [1] in service mode. |
| PB HIGH Signal Output | 8 pin of AV 1 Jack (PB HIGH terminal) is High (approx. 11V DC). | <div>PBHIGH</div> | Press [5] [2] in service mode. |
| PB MIDDLE Signal Output | 8 pin of AV 1 Jack (PB HIGH terminal) is Middle (approx. 5.5V DC). | <div>PBMIDDLE</div> | Press [5] [3] in service mode. |
| Front connection inspection | Press all front keys and check the connection between Main P.C.B. and Front P.C.B. | <div> <div>0Γ**</div> <div>0Γ**</div> <div>(1) (2) (1) (2)</div> </div> <p>(1) Each time a key is pressed, segment turned on increases one by one. (2) Total number of keys that have been pressed.</p> | Press [5] [4] in service mode. |

| Item | | FL display | Key operation |
|--------------------------------------|--|--|--|
| Mode name | Description | | (Remote controller key) |
| Production Date Display | Display the date when the unit was produced. | <div> <div>yyyymmdd</div> <div> YYY: Year MM: Month DD: Day </div> </div> | Press [6] [1] in service mode. |
| Display the accumulated working time | Display the accumulated unit's working time. | <div> <div>*****</div> <div>(Indicating unit: Second)</div> </div> | Press [6] [4] in service mode. |
| Display the Error History | Display the Error History stored on the unit. | <div> <div> <div>Display reason of error for 5 seconds.</div> <div>***</div> <div> Description of Error Numbers NO FTREC: No error 01: Defect of Digital P.C.B. (AV DEC/MAIN CPU) 02: Defect of RAM Drive 03: Defect of Disc 04: Defect of Digital P.C.B. or Communication Error 05: Defect of Digital P.C.B. (AV DEC/MAIN CPU) 06: Defect of HDD Display the time when the error has occurred for 5 seconds. </div> <div> <div>ymmddhhmm</div> <div> Y: Year MM: Month DD: Day HH: Hour MM: Minute Display the accumulated working time to occurring of the error for 5 seconds. </div> <div>*****</div> <div>(Indicating unit: Second)</div> </div> </div> </div> | Press [6] [5] in service mode. Then press [0] [1] ~ [1] [9], the past 19 error histories are displayed. |
| Delete the Error History | Delete Error History information stored on the unit. | <div> <div>CLRFTREC</div> </div> | Press [9] [7] in service mode. |
| SD card WRITE check | Check SD card WRITE function with SD card slot. | <div> <div>When the WRITE check is OK.</div> <div> <div>SDCD OK</div> <div>When the WRITE check is NG.</div> <div> <div>SDCD NG</div> <div> *Note: The image stored in the SD card will be erased. </div> </div> </div> </div> | Insert a SD card to SD card slot, and press [7] [4] in service mode. * Insert SD card while the power is off. * Check for [CARD SD] display on the FL display and go on the procedure. |

| Item | | FL display | Key operation |
|---------------------------------|---|---|---|
| Mode name | Description | | (Remote controller key) |
| AV4 (V) / AV1 (RGB) I/O Setting | Set input to AV4(V) and set output to AV1(RGB) for I/O checking | 01 PRL 10 | Press [8] [0] in service mode. |
| AV2 (Y/C) / AV1 (V) I/O Setting | Set input to AV2(Y/C) and set output to AV1(V) for I/O checking | 02 PRL 10 | Press [8] [1] in service mode. |
| AV2 (V) / AV1 (Y/C) I/O Setting | Set input to AV2(V) and set output to AV1(Y/C) for I/O checking | 03 PRL 10 | Press [8] [2] in service mode. |
| AV2 (RGB) / AV1 (V) I/O Setting | Set input to AV2(RGB) and set output to AV1(V) for I/O checking | 04 PRL 10 | Press [8] [3] in service mode. |
| P50 (H) Output | Timer Microprocessor IC7501-22 output High signal for AV1-pin 10 passing through inverter (approx. 0V DC at AV1-pin 10). | <p>P50HI</p> <p>When OK.</p> <p>P50HI OK</p> <p>When NG.</p> <p>P50HI NG</p> | Press [8] [4] in service mode. |
| P50 (L) Output | Timer Microprocessor IC7501-22 output Low signal for AV1-pin 10 passing through inverter (approx. 4.4 V DC at AV1-pin 10). | <p>P50LOW</p> <p>When OK.</p> <p>P50LOW OK</p> <p>When NG.</p> <p>P50LOW NG</p> | Press [8] [5] in service mode. |
| Tray OPEN/CLOSE Test | The RAM drive tray is opened and closed repeatedly. | <p>*****</p> <p>“*” is number of open/close cycle times.</p> | Press [9] [1] in service mode *When releasing this mode, press the [POWER] button on Front Panel more than 10 seconds. |
| Error code initialization | Initialization of the last error code held by timer (Write in F00) | CLRE - CODE | Press [9] [8] in service mode. |
| Initialize Service | Last Drive Error, Error history and Error Codes stored on the unit are initialized to factory setting. Then VHS Microprocessor is initialized to shipping setting too. | CLRSERV | Press [9] [9] in service mode. |
| Finishing service mode | Release Service Mode. | <p>Display in STOP (E-E) mode.</p> <p>*****</p> | Press power button on the front panel in service mode. |

13 (VHS) SELF-DIAGNOSIS AND SPECIAL MODE SETTING

13.1. (VHS) SPECIAL MODES SETTING

| Item | | FL display | Key operation |
|------------------------------------|---|--|--|
| Mode name | Description | | Front Key |
| Tracking Center | Tape Tracking is adjusted to center FIX position. | No display. | During PLAYBACK, press [VHS CH UP] and [VHS CH DOWN] keys simultaneously. |
| VHS Service Mode | In order to make service easy, a part of inside information of a microprocessor is displayed on FIP. *Details are described in "VHS Service Mode". |  | Press [FF], and [EJECT] keys simultaneously for three seconds when power is off. |
| Releasing EXT LINK & Timer Program | Releasing Continuation EXT LINK & Continuation Timer Program | No display. | While in EXT LINK or Timer REC mode, press [VHS STOP] key for 3 seconds. |
| Eject | Ejecting Cassette Tape | No display. | While in other than Timer REC mode, press [VHS STOP] key for 3 seconds or press [STOP] key of the Remote Controller for 3 seconds in VHS mode. |

13.2. (VHS) SERVICE MODES

(Service Mode Setting)

- When power is OFF, press [FF] and [EJECT] keys simultaneously for 3 seconds to into Service Mode.
- In Service Mode, press [FF] and [EJECT] keys simultaneously to add Service Number.

| Service Mode Number | Contents | Contents of Indication on minute | Contents of Indication on second | Remarks |
|---------------------|---|---|--|--|
| 0 | Indication for the inner data of IC6001 | VHS mode (Real time) | Process number of the mechanism movement (Real time) | |
| 1 | Indication for the inner data of IC6001 | Tape beginning and ending detection data (Real time) 00: Both tape beginning and ending have not been detected 01: Tape ending is detecting now 02: Tape beginning is detecting now 03: Both tape beginning and ending are detecting now | Key code (Real time) Indicate the receiving code when the key of VCR or remote controller being operated. | |
| 2 | Indication for the inner data of IC6001 | Mechanism position (Real time) 0L: EJECT position 02: DOWN position 03: RREW position 04: LOAD position 05: REV position 06: PLAY position 07: POFF position 08: STOP_R position 09: STOP_F position 0- : FF/REW position 0_ : Intermediate between each positions | Ordering for the Motors (Real time) 0*, 2*: CYL off, CAP off 1*: CYL off, CAP on (fwd) 3*: CYL off, CAPon (rev) 8*, A*: CYL on, CAP off 9*: CYL on, CAPon (fwd) B*: CYL on, CAP on (rev) *0: Motor off *1: Loading *2: Unloading *3: Break (Load + Unload) | The following functions are prohibited to operate the mechanism without cassette tape. ●Tape beginning and ending detection. ●Reel lock detection ●Tape detection and tape position detection Press the EJET key for over 3 seconds in this mode, and then the VCR is shifted into the special modes, such as PG Adjustment, Model Code Setting, and so on. The orders for the motors are asfollows. |
| 3 | Self-diagnosis history (1st) | 1st history of error number | "- -" is displayed. | |
| 4 | Self-diagnosis history (2nd) | 2nd history of error number | "- -" is displayed | |
| 5 | Self-diagnosis history (3rd) | 3rd history of error number | "- -" is displayed | |
| 6 | Indication for the inner data of IC6001 | Servo data (4 digits) (Real time) | | |

| Service Mode Number | Contents | Contents of Indication on minute | Contents of Indication on second | Remarks |
|---------------------|----------------------------|---|--|--|
| 7 | Manual mechanism operation | Mechanism position (Real time) 0L: EJECT position 02: DOWN position 03: RREW position 04: LOAD position 05: REV position 06: PLAY position 07: POFF position 08: STOP_R position 09: STOP_F position 0- : FF/REW position 0_ : Intermediate between each positions | Ordering for the Motors 0*, 2*: CYL off, CAP off 1*:CYL off, CAP on (fwd) 3*: CYL off, CAPon (rev) 8*, A*: CYL on, CAP off 9*: CYL on, CAPon (fwd) B*: CYL on, CAP on (rev) *0: Motor off *1:Loading *2: Unloading *3: Break (Load + Unload) | Press the following key; PLAY key: Loading STOP key: Unloading |

13.3. (VHS) SELF-DIAGNOSIS FUNCTIONS

This model has a self-diagnosis. If the VHS section detects trouble during installation or during use, the power is automatically turned off or become power-save mode and it is memorized into the EEPROM (IC37502) as error code of two-digit number. It is memorized error code can be displayed in "second" display portion (the last 2 digits of the FIP) by placing the unit in Service Mode Number 2 when turning on the Service Information Display as for example "01" or "02" etc. as below. If a second error occurs, the most recent error will be memorized and can be displayed in Service Mode Number 2. It can be memorized until 3 self-diagnosis histories in maximum.

In order to erase the memorized error code, press FF and EJECT buttons on the Front Panel simultaneously over 5 seconds during turning on Service Information Display mode.

13.3.1. MEMORY OF THE SELF-DIAGNOSIS HISTORY

*This is effective only in Service Mode 3, 4, 5.

13.3.1.1. ERROR NUMBERS AT A GLANCE

| Memory No. (Error Code) | Reason |
|--------------------------|--|
| 01 | The cylinder could not be started. (Error of the cylinder or the cylinder driver.) |
| 02 | The CAP FG could not be detected. |
| 03 | Mechanism lock during without the unloading and the cassette-up. |
| 04 | Mechanism lock during unloading |
| 05 | S-reel pulse cannot be detected during unloading. (Error of the S-reel circuit or the Capstan circuit) |
| 06 | Mechanism lock during the Cassette-up. |
| 09 | Communication Error between VHS Microprocessor and Timer Microprocessor. |
| 15 | S-reel pulse cannot be detected when a cassette tape is inserted. (Error of the S-reel circuit or the Capstan circuit) |
| 16 | Detection of the Cylinder lock during the constant rotation |
| 17 | Detection of S-reel lock during the constant tape running |
| 18 | Detection of T-reel lock during the constant tape running |
| 2* | An error while the PG Automatic Adjustment |
| Refer to following table | |
| 80 | An exceptional ejection depends on a accidental error |

Note:

2* is as follows.

| | |
|----|---|
| 20 | NG1 in the PG Shifter Automatic Adjustment (The cylinder rotation is unstable during the automatic adjustment.) |
| 21 | NG2 in the PG Shifter Automatic Adjustment (The vertical sync signal is lacked while over 5 seconds on the alignment tape.) |
| 22 | NG3 in the PG Shifter Automatic Adjustment (The installing position of Heads to the cylinder is out of specification.) |
| 23 | NG4 in the PG Shifter Automatic Adjustment (The servo is not locked to the cylinder for more than 10 sec.) |

13.3.1.2. MEMORY FOR THE SELF-DIAGNOSIS HISTORY

3. The self-diagnosis result is memorized the state of the moment of detecting.

4. There are the histories from number 1 to number 3.

5. The latest error is memorized on history number 1, and then the old histories are shifted to the history number 2 and 3.

The error code memorized in the history number 2 and 3 is over-written by shift.

4. If the latest error is the same with the history number 1 (2nd-latest), it is not memorized.

(The same error code is not memorized in succession)


13.3.1.3. CLEAR FOR THE SELF-DIAGNOSIS HISTORY

1. Press FF and EJECT buttons on the VCR simultaneously over 5 seconds during turning on Service Information Display mode.

13.3.1.4. INDICATION OF THE SELF-DIAGNOSIS HISTORY

The self-diagnosis histories can be indicated on the FIP with Service Mode number 3 to 5.

The procedure of service mode setting and indication format are the same as usual.

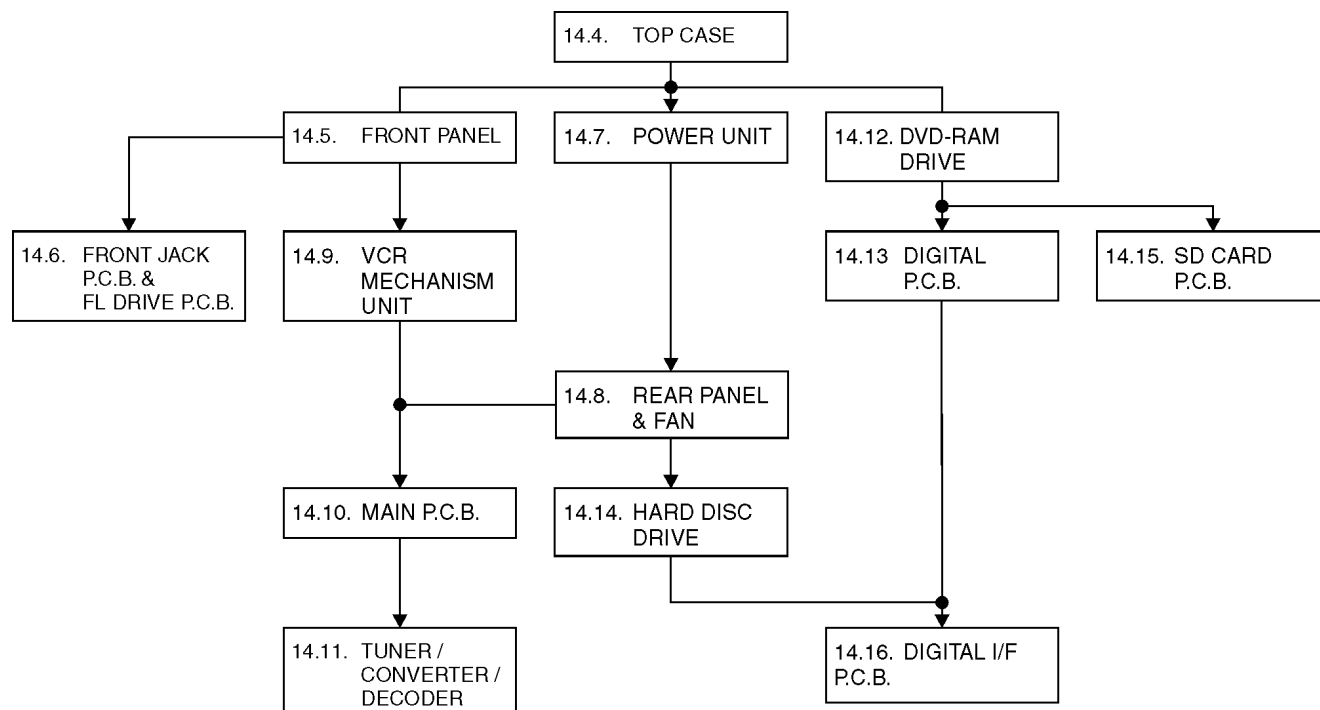
| | | | | |
|--|--------------------------------------|---------------------|---------------------|---------------------|
| FIP INDICATION:  | | | | |
| Hour of one-digit | Minute of two-digit | Minute of one-digit | Second of two-digit | Second of one-digit |
| Service mode number | Error code | | — | — |
| 3 | Error code of history 1 (the latest) | | — | — |
| 4 | Error code of history 2 (2nd latest) | | — | — |
| 5 | Error code of history 3 (3rd latest) | | — | — |

The Error code of history 1, 2 and 3 can be indicated by selecting the Service mode 3, 4 and 5.
In case of no error code in the memory, it is indicated as "00".

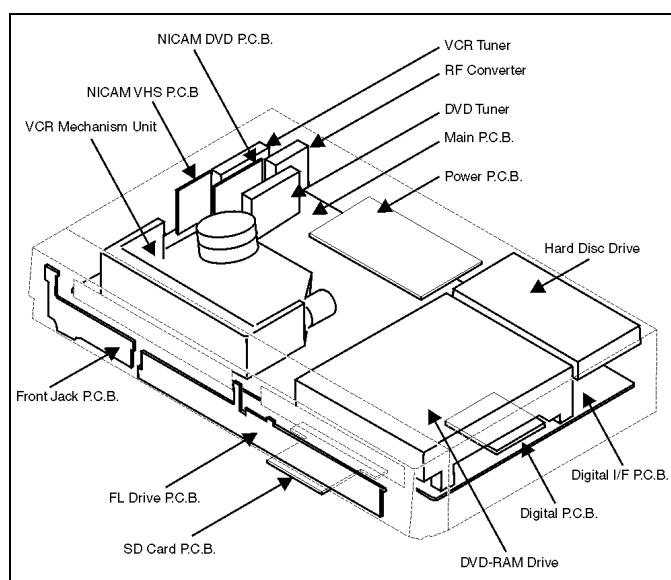
14 ASSEMBLING AND DISASSEMBLING

14.1. DISASSEMBLY FLOW CHART

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing. To assemble the unit, reverse the steps shown in the chart below.



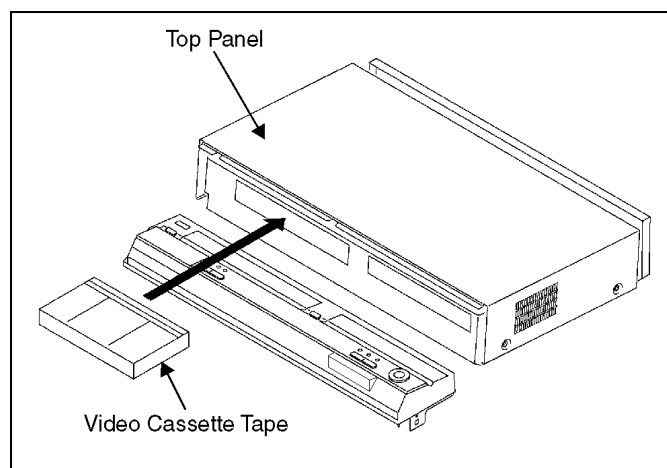
14.2. P.C.B. POSITIONS



14.3. CAUTION WHILE INSERTING CASSETTE TAPE WHEN DISASSEMBLING THE UNIT

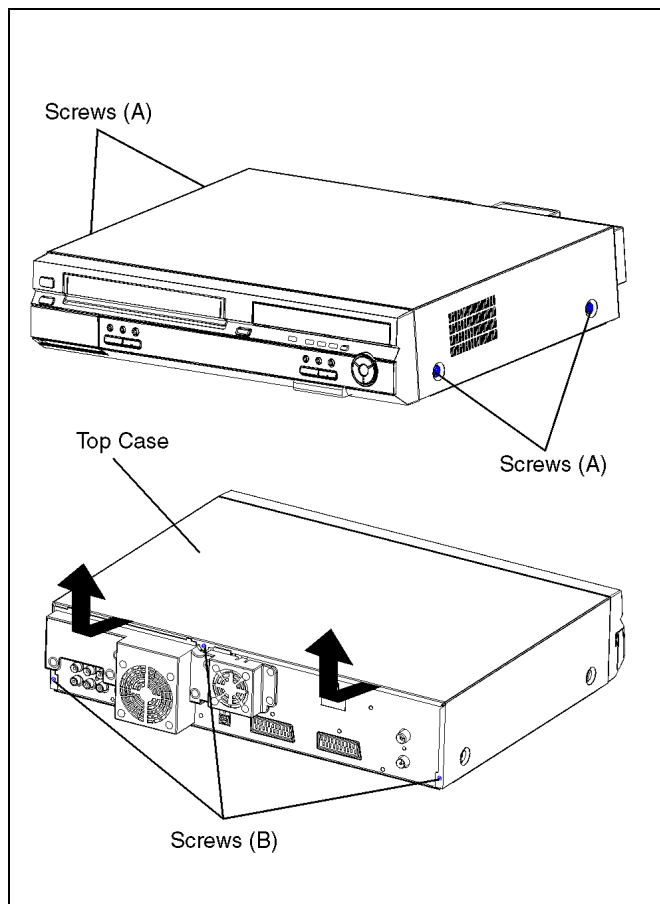
NOTE:

Video Cassette might not enter when a strong lighting is applied to VHS Mechanism when Video Cassette is inserted. Please weaken the lighting or cover with the top panel etc.



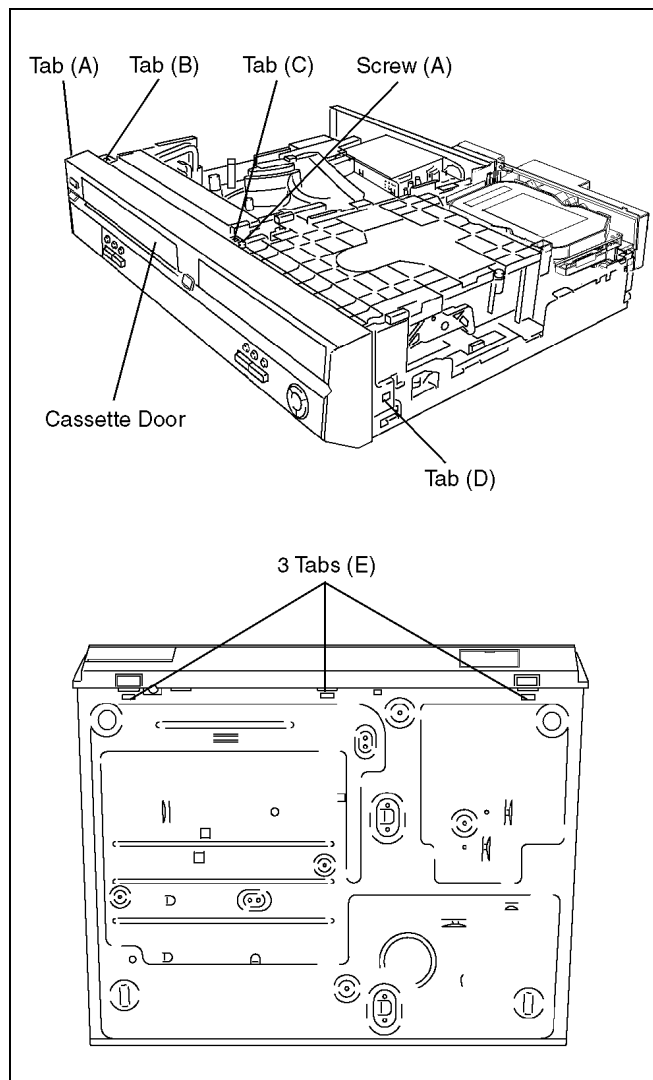
14.4. TOP CASE

1. Remove the 4 screws (A) and 3 screws (B).
2. Slide the Top Case for rear direction slightly, and open the both ends at rear side of the Top Case a little and lift up the Top Case for the direction of the arrows.



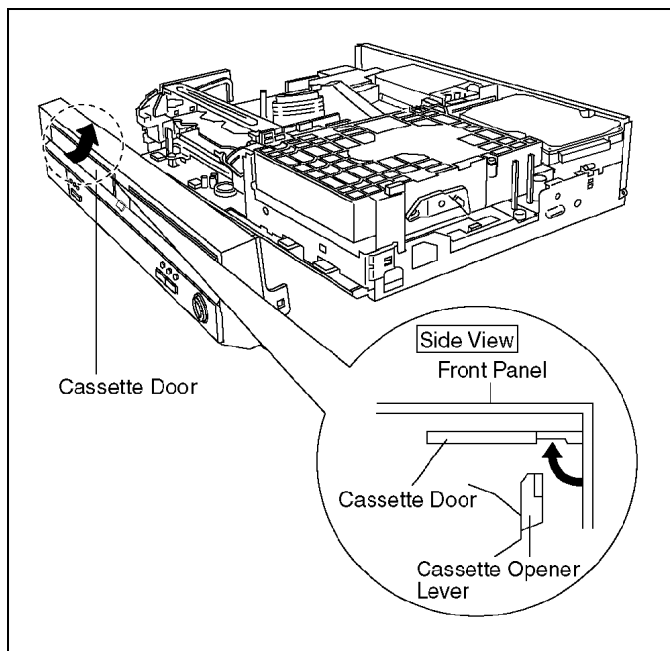
14.5. FRONT PANEL

1. Remove one screw (A).
2. Unlock tab (A) and tab (B) simultaneously.
3. Unlock tab (C) and tab (D) simultaneously.
4. Unlock 3 tabs (E) respectively and pull out Front Panel with connector slightly.



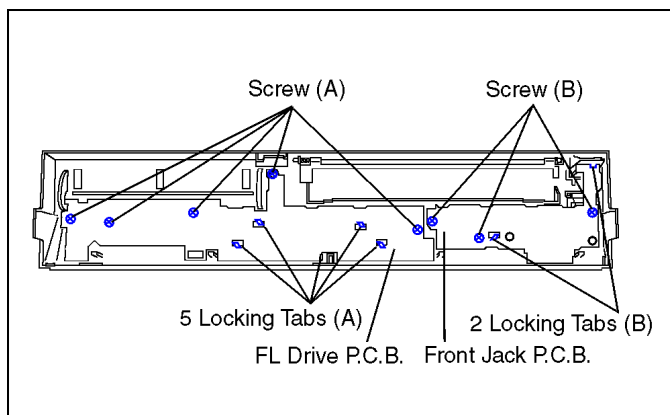
Note:

When attaching Front Panel, in order to hook Cassette Door Opener Lever to Cassette Door, push up cassette door in the direction of arrow and insert a front panel.



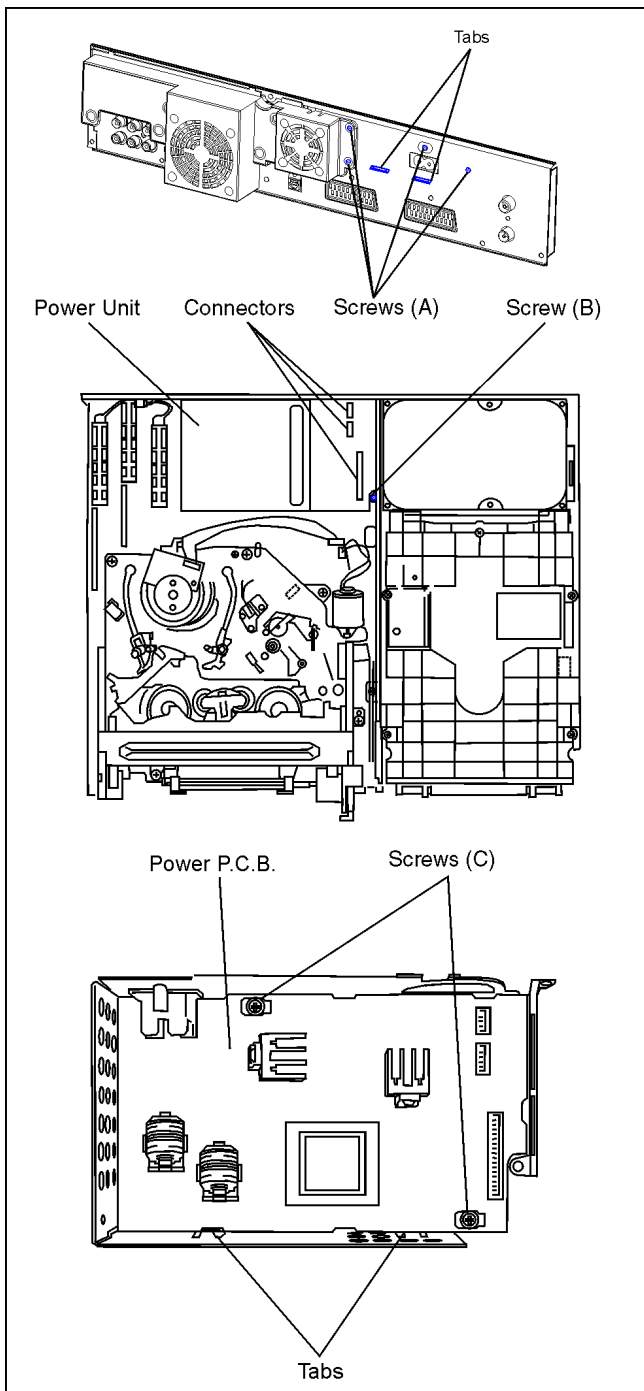
14.6. FRONT JACK P.C.B. & FL DRIVE P.C.B.

1. Remove one 5 screws (A) and unlock 5 Locking Tabs (A) to remove FL Drive P.C.B. .
2. Remove one 3 screws (B) and unlock 2 Locking Tabs (B) to remove Front Jack P.C.B. .



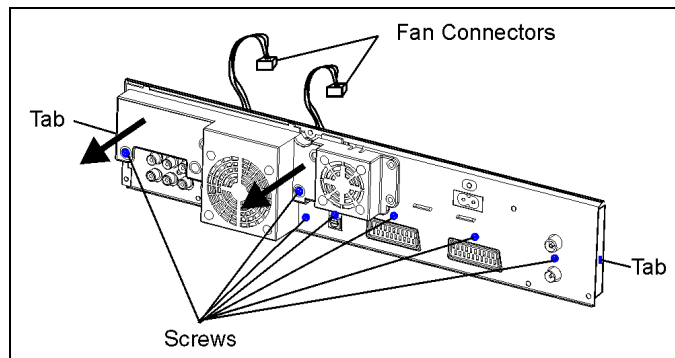
14.7. POWER P.C.B.

1. Disconnect 3 Connectors from Power P.C.B. .
2. Remove 5 Screws (A).
3. Remove Screw (B).
4. Lift up Power Unit vertically out of Tabs.
5. Open the Top Cover of the Shield Case.
6. Remove the 2 Screws (C).
7. Lift up Power P.C.B. out of the Tabs.



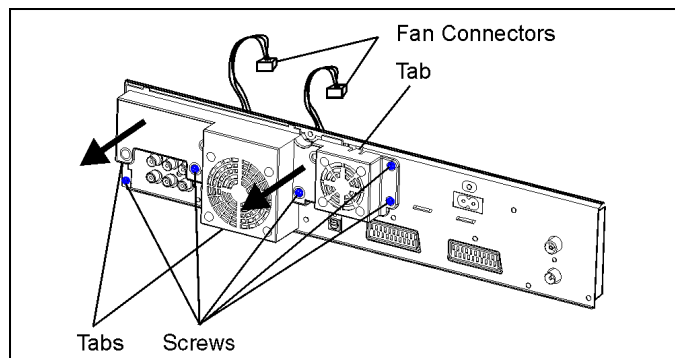
14.8. REAR PANEL & FAN MOTOR

1. Remove the 2 Fan Connectors.
2. Remove 7 Screws.
3. Unlock 2 Locking Tabs to remove Rear Panel with Fan Motor.
4. Attention when inserting Rear Panel:
Don't shut the Fan Cable between Rear Panel and Chassis.



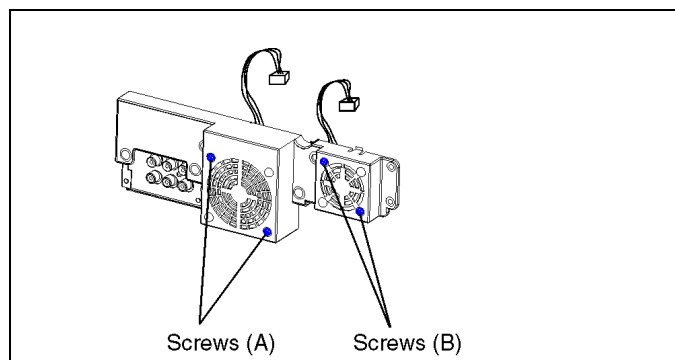
14.8.1. ONLY FAN MOTOR UNIT

1. Remove the 2 Fan Connectors.
2. Remove the 5 Screws.
3. Unlock the 3 Tabs and remove the Fan Motor Unit.



14.8.2. FAN MOTOR

1. Remove the Screws (A) or Screws (B).
2. Remove the selected Fan Motor.

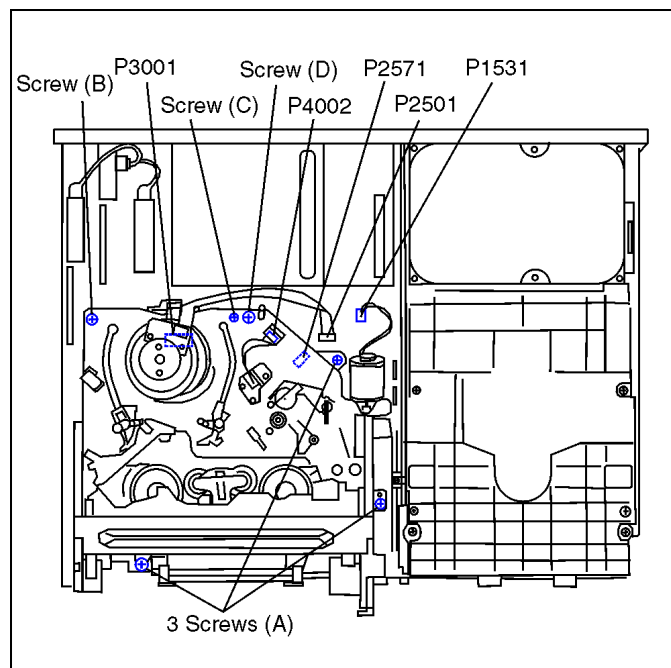


14.9. VCR MECHANISM UNIT

1. Disconnect 3 Connectors (P1531, P2501 and P4002).
2. Remove 3 Black Screws (A), Screw (B), Screw (C) and Screw D).
3. Lift up VCR Mechanism Unit perpendicularly so to disconnect Connectors (P2571 and P3001).

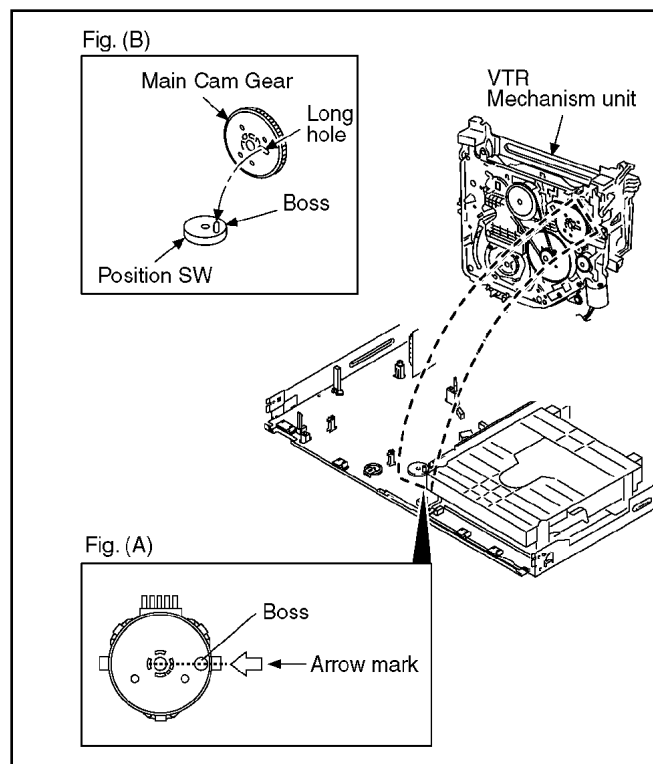
Note:

When you lift up VCR Mechanism Unit, because connections of P2501 and P3001 are tight, pay attention to that.



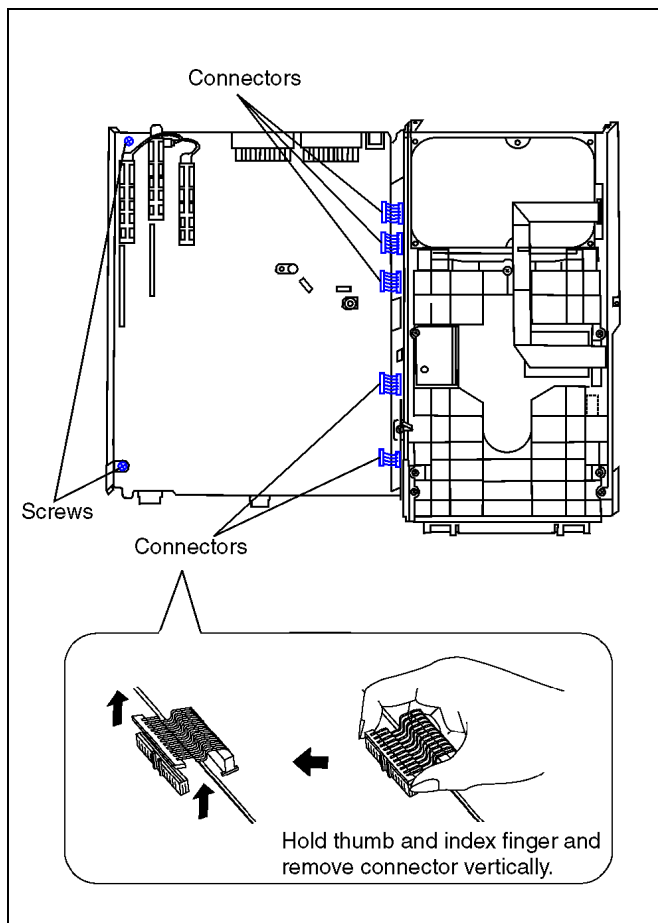
14.9.1. CAUTION FOR ATTACHING VCR MECHANISM UNIT

1. Because Position SW should be set to "Eject Position", refer to fig.(A) and set the position switch so that the boss and arrow mark come on a straight line.
2. Attach VCR Mechanism Unit so that Boss of Position SW is put into long hole of Main Cam Gear, refer to Fig. (B).



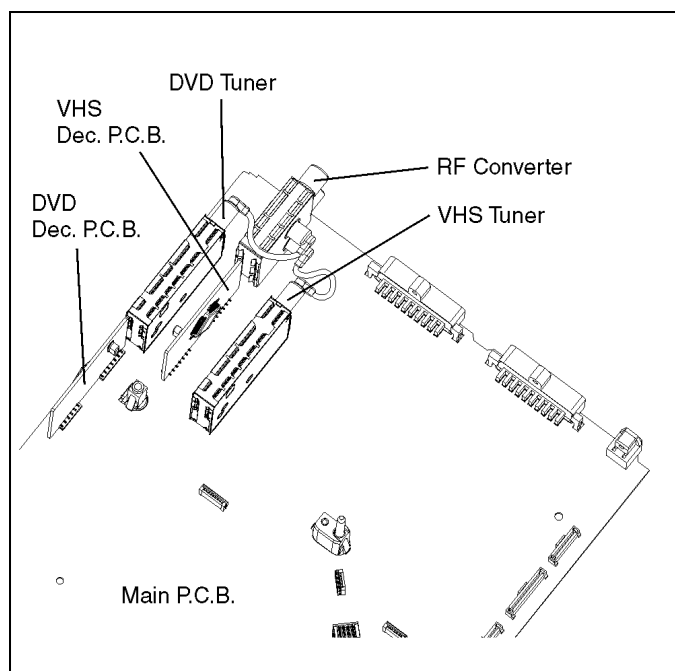
14.10. MAIN P.C.B.

1. Disconnect 5 Connectors.
2. Remove 2 Screws (A), and remove Main P.C.B.



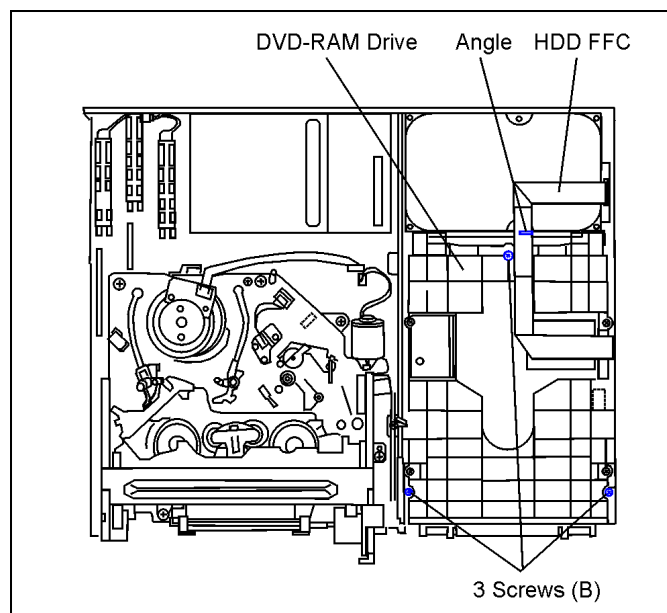
14.11. TUNER / CONVERTER / DECODER

1. Remove the solders.
2. Pull out the P.C.B. .

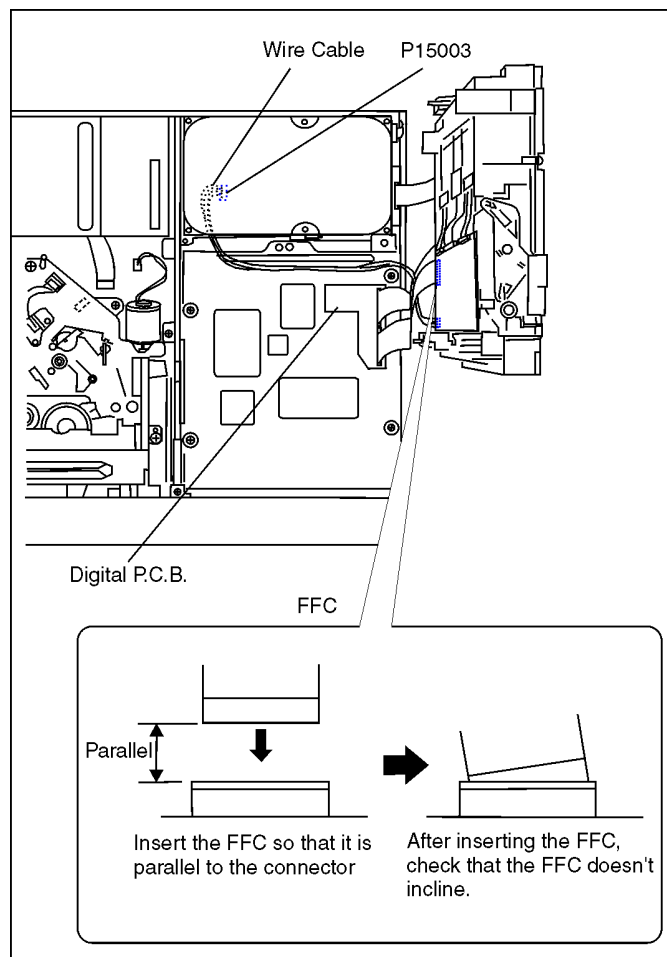


14.12. DVD-RAM DRIVE

1. Take out HDD FFC from Angle sideways.
2. Remove 3 Screws (B).
3. Lift up DVD-RAM Drive slightly.



4. Remove Wire Cable from Connector P15003.
5. Disconnect FFC from Digital P.C.B. .



14.13. DIGITAL P.C.B.

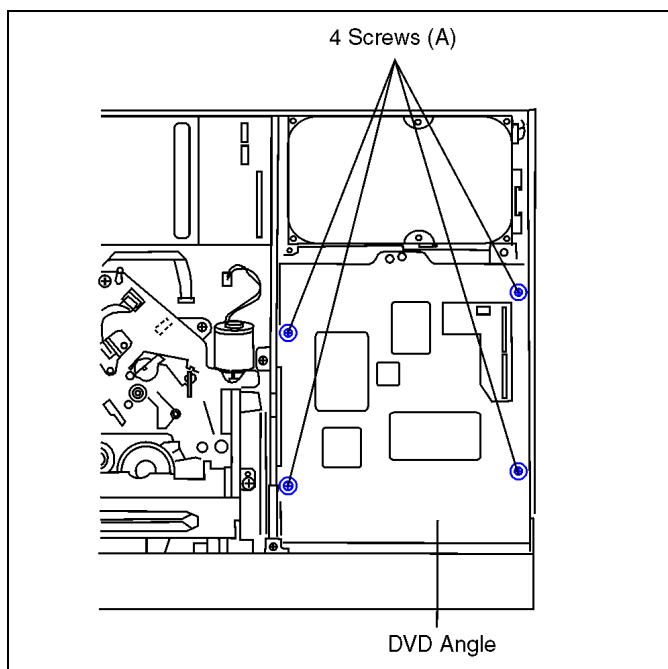
Note:

When replacing the Digital P.C.B., "UNFORMAT" indication is displayed and HDD must be formatted.

- After "UNFORMAT" is displayed on the FL display, warning message for HDD format is appeared on the TV screen.
- Select "YES" and press "ENTER" button on the remote control; the HDD will be formatted automatically.
- After that **all programme in the HDD will be lost.**

How to format the HDD.

1. Remove 4 Screws (A) and DVD Angle.



2. Disconnect FFC.
3. Remove Screw (B).
4. Unlock Clamper (A), pay attention to Connector (A), and pull out Digital P.C.B. to disconnect Connector (A).

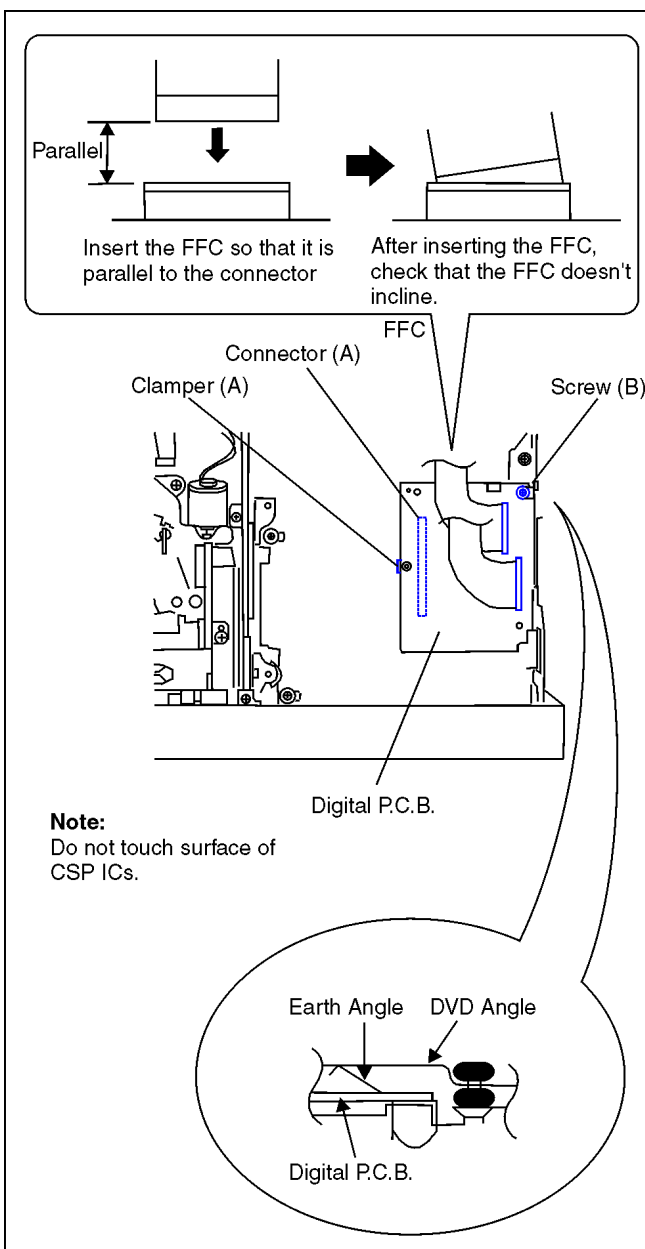
CAUTION 1:

When replacing Digital P.C.B., pay attention to inserting FFC, and be careful to do not touch surface of CSP ICs.

If you have touched surface of CSP IC, clean up with alcohol and so on to prevent oxidation.

CAUTION 2:

When attaching Digital P.C.B. on to Earth Angle, Earth Angle should be touches to DVD angle as shown.



14.14. HARD DISC DRIVE

Note:

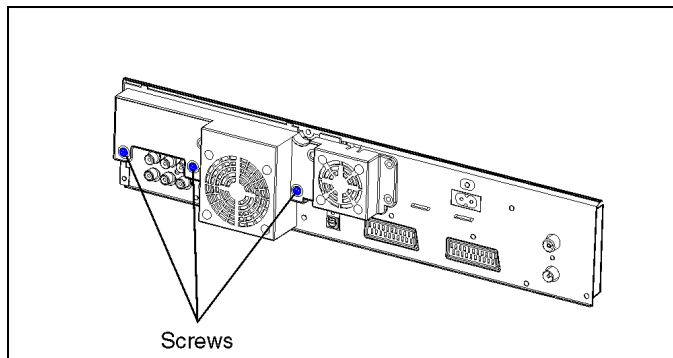
When replacing with HDD (HARD DISC DRIVE) "UNFORMAT" indication

is displayed and HDD (HARD DISC DRIVE) must be formatted.

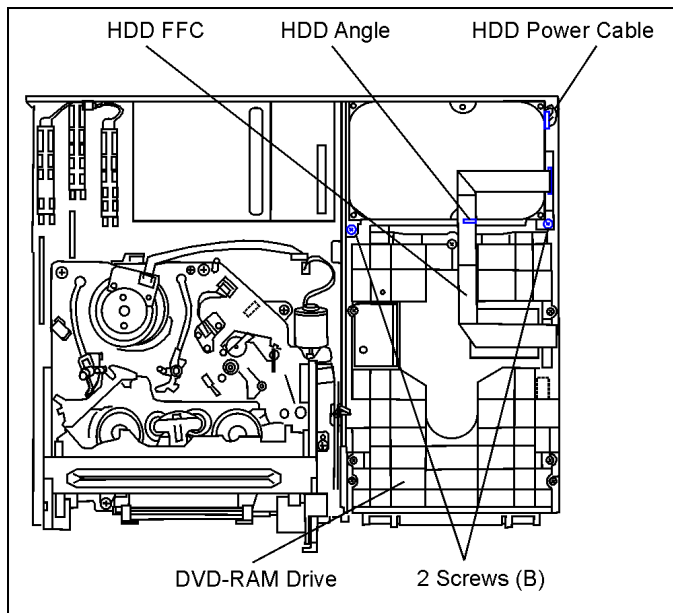
- After "UNFORMAT" is displayed on the FL display, warning message for HDD format is appeared on the TV screen.
- Select "YES" and press "ENTER" button on the remote control; the HDD will be formatted automatically.
- After that **all programme in the HDD will be lost.**

How to format the HDD.

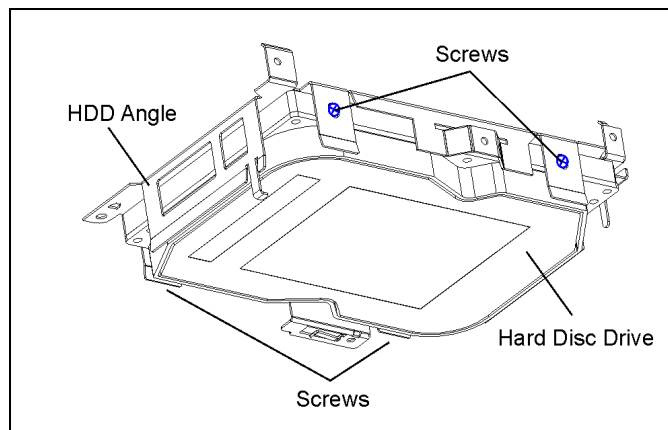
1. Remove 3 Screws from the Rear Panel.



2. Disconnect HDD Power Cable from Hard Disc Drive Unit.
3. Take out HDD FFC from HDD Angle sideways and disconnect the FFC from Hard Disc Drive Unit.
4. Remove 2 Screws (B) from HDD Angle.



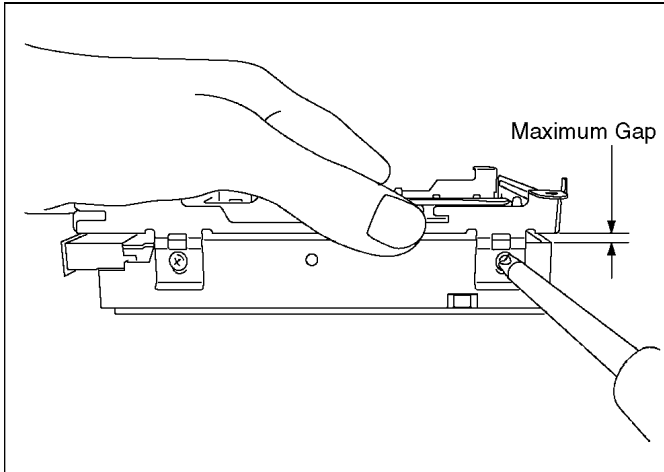
5. Lift up HDD Angle together with Hard Disc Drive.
6. Put HDD with HDD Angle up side down so as not give a shock to HDD.
7. Remove 4 Screws from Hard Disc Drive.



Caution for Attaching HDD

Put HDD up and down inversely so as not to give a shock to HDD,

and put HDD Angle on to HDD and tighten 4 screws while lifting HDD Angle so as to keep maximum gap between HDD and HDD Angle.



Handling of HDD

The following precautions should be taken when handling HDD.

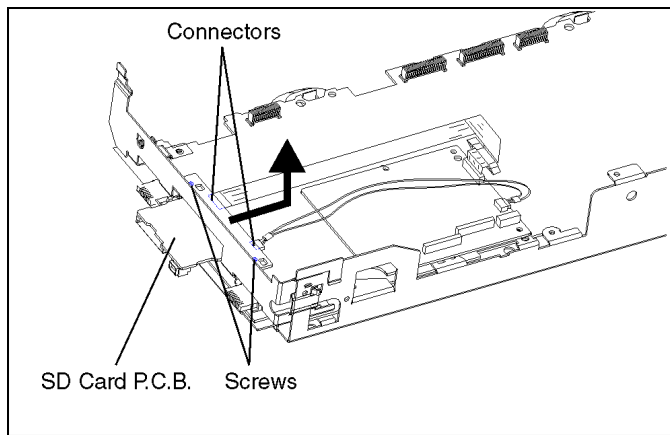
- a. Never give an impact to HDD. (Even a drop from 1 cm height can be a cause of HDD failure).
- b. When placing HDD on a workbench, provide a mat on a bench for shock absorption and anti-static purposes.
- c. When installing HDD, release it from your hands only after confirming that it is fully set on the chassis.
- d. Avoid stacking up HDD.
- e. HDD is unstable and easy to fall. Do not stand it on its side face.
- f. When handling HDD, hold its side faces to avoid static hazard.
- g. Do not place HDD on its wrapping bag after removal. (Prevention of static hazard.)
- h. Use a screwdriver with low impact and anti-static features.

Note:

When replacing HDD, please make the rear jumper slave or cable select configuration.

14.15. SD CARD P.C.B.

1. Remove Front Panel, Power Unit, Rear Panel, Hard Disc Drive Unit, DVD-RAM Drive.
2. Disconnect 2 Connectors.
3. Remove the 2 Screws.
4. Remove SD CARD P.C.B. .

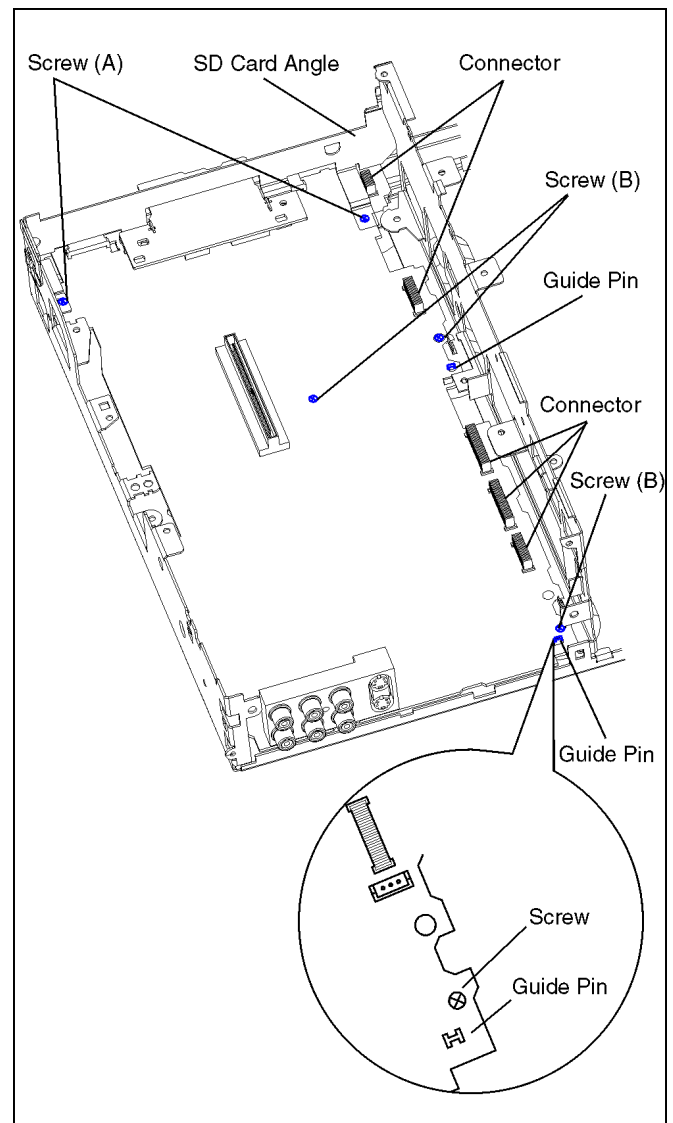


14.16. DIGITAL I/F P.C.B.

1. Remove Front Panel, Power Unit, Rear Panel, Hard Disc Drive Unit, DVD-RAM Drive, Digital P.C.B., SD Card Unit
2. Disconnect 5 Connectors.
3. Remove the 2 Screws (A) from SD Card Angle.
4. Remove SD Card Angle together with SD Card P.C.B. .
5. Remove the 3 Screws (B) from Digital I/F P.C.B. .
6. Remove Digital I/F P.C.B. .

Note:

When inserting P.C.B. confirm correct positions of Guide Pins.



15 SERVICE FIXTURE AND TOOLS

| Part Number | Description | Pcs | Compatibility |
|-------------|--|-----|-------------------------------------|
| RFKZ0125 | Extension FFC (Digital P.C.B. - DVD-RAM Drive / 40 Pin) | 1 | Same as E30/HS2/E50/E55/ES10 series |
| VFK1729 | Extension Cable (Main P.C.B. - Digital I/F P.C.B. / 13pin/40mm) | 2 | Same as E75V |
| RFKZ0240 | Extension Cable (Main P.C.B. - Digital I/F P.C.B. / 19pin/40mm) | 2 | Same as E75V |
| RFKZ0178 | Extension Cable (Main P.C.B. - Digital I/F P.C.B. / 7pin/40mm) | 1 | Same as E75V |
| RFKZ0215 | Extension Cable (Main P.C.B. - Front Jack P.C.B. / 12 Pin) | 1 | Same as DMR-E55/E75V series |
| RFKZ0238 | Extension Cable (Main P.C.B. / Digital I/F P.C.B. - FL Drive P.C.B. / 8 Pin) | 1 | Same as E75V |
| RFKZ0239 | Extension Cable (Digital I/F P.C.B. - FL Drive P.C.B. / 10 Pin) | 1 | Same as E75V |

(for VHS)

| Part Number | Description | Pcs | Compatibility |
|-------------|-----------------------------|-----|---------------|
| VFJ8125H3F | PAL VHS Alignment Tape | 1 | Same as E75V |
| VFK0329 | Post Adjustment Screwdriver | 1 | Same as E75V |
| VFK0330 | Fine Adjustment Gear Driver | 1 | Same as E75V |

16 SERVICE POSITIONS

16.1. CHECKING AND REPAIRING OF POWER P.C.B.

1. Top Case

- Remove 4 Screws (A) on side
- Remove 3 Screws (B) on rear
- Remove Top Case

2. Rear Panel

- Remove 1 Screw from Fan (right upper corner)
- Remove 1 Screw from Rearpanel (above Power Connector)
- Remove 1 Screw beside Power Connector

3. Power P.C.B. Angle

- Remove 1 Screw

4. Power P.C.B.

- Disconnect 3 Connectors from Power P.C.B.
- Lift up Power Unit vertically out of Tabs
- Open the Top Cover of the Shield Case
- Remove the 2 Screws (C)
- Lift up Power P.C.B. out of the Tabs
- Connect 3 Connectors to Power P.C.B.

Caution 1:

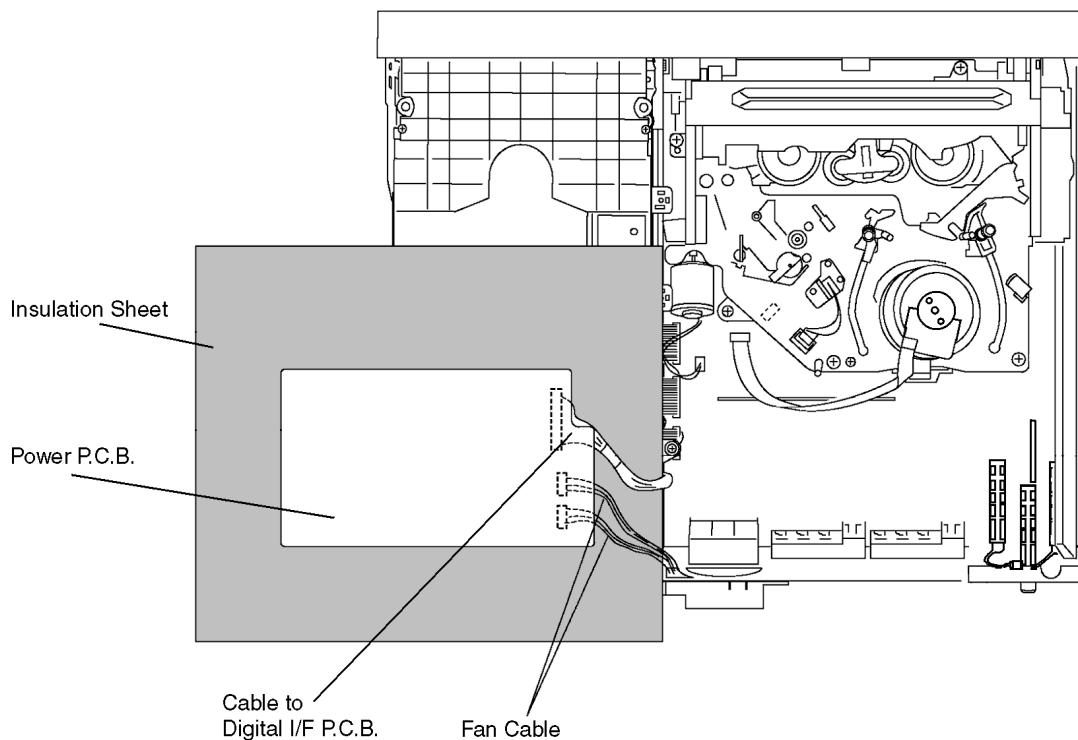
Original screw should be used.

Caution 2:

In some case, Shield Case of Power Unit is soldered.

In this case, remove solder when removing Shield Case and certainly solder Shield Case when installing.

If soldering was not done, noises mix into picture.



16.2. CHECKING AND REPAIRING OF DIGITAL I/F P.C.B.

1. Top Case

- Remove 4 Screws (A) on side
- Remove 3 Screws (B) on rear side
- Remove Top Case

2. Front Panel

- Remove one Screw (A) on center
- Unlock 2 Locking Tabs (A), (D) on Front Panel side
- Unlock 2 Locking Tabs (B), (C) on Front Panel topside
- Unlock 3 Locking Tabs (E) on Front Panel bottom side
- Remove Front Panel

3. Power Unit and Rear Panel

- Disconnect 3 Connectors from Power P.C.B.
- Remove all Screws from Rear Panel and Fan Unit (Screws for Fan Motor not necessary)
- Remove 1 Screws Power P.C.B. Angle and lift up Power Unit vertically out of Tabs
- Remove Rear Panel with Fan Motor Unit

4. Hard Disc Drive & Hard Disc Angle

- Disconnect HDD Power Cable from Hard Disc Drive Unit
- Take out HDD FFC from HDD Angle sideways
- Disconnect the HDD FFC from Hard Disc Drive Unit
- Remove 2 Screws (B) from HDD Angle
- Lift up HDD Angle together with Hard Disc Drive Unit

5. DVD-RAM Drive

- Remove Power Cable (DVD-RAM Drive) from Digital I/F P.C.B.
- Remove the 4 Screws from DVD Angle
- Lift up DVD Angle together with DVD-RAM Drive and put it upside-down
- Put a solid Insulation Sheet on DVD-Ram Drive Unit

6. SD Card Angle and Digital P.C.B.

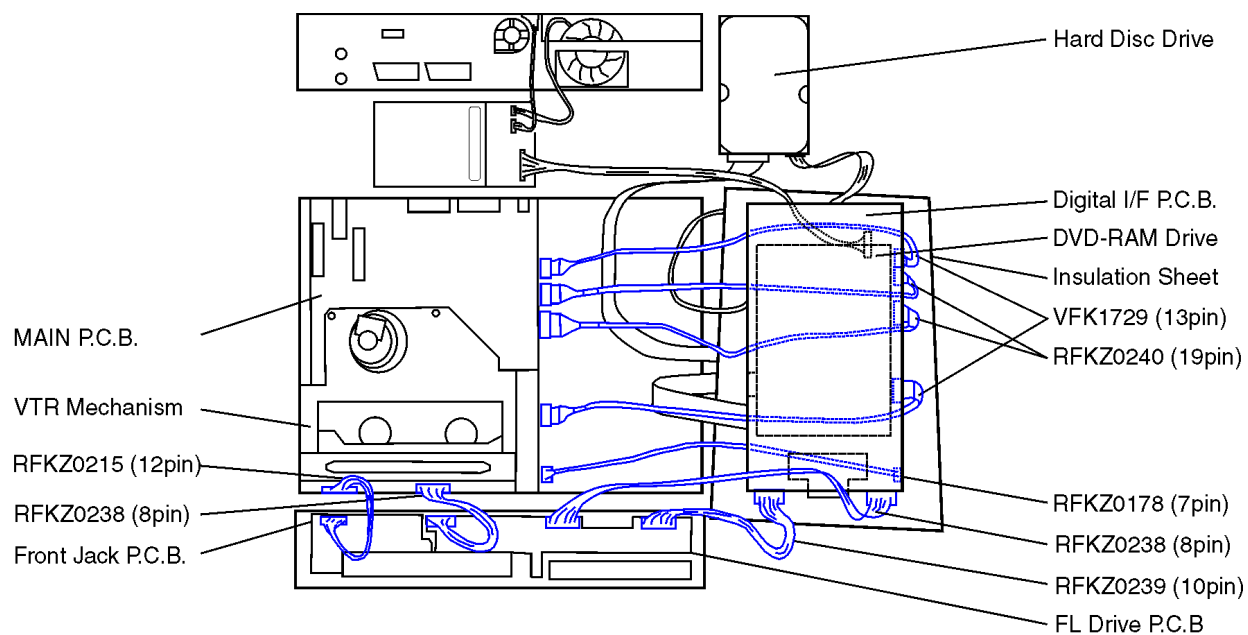
- Remove 2 Screws from SD Card Angle
- Remove Screw (B) from Digital P.C.B.

7. Remove Digital I/F P.C.B.

- Disconnect 5 Connectors from Digital I/F P.C.B.
- Remove 3 Screws (B) from Digital I/F P.C.B.
- Lift up Digital I/F P.C.B. together with Digital P.C.B. and SD Card Angle out of Chassis
- Put it upside down on the Insulation Sheet

8. Connect Digital I/F P.C.B.

- Connect the Cables:
 - between Digital I/F P.C.B. and Hard Disc Drive (2x)
 - between Digital I/F P.C.B. and DVD-RAM Drive (1x)
 - between Digital I/F P.C.B. and Power P.C.B. (1x)
 - between Power P.C.B. and Fan Motor (2x)
 - between Main P.C.B. and Digital I/F P.C.B.: RFKZ0178 (1x), RFKZ0240 (2x), VKF1729 (2x)
 - between Main P.C.B. and Front Jack P.C.B.: RFKZ0215 (1x)
 - between Main P.C.B. and FL Drive P.C.B.: RFKZ0238 (1x)
 - between Digital I/F P.C.B. and FL Drive P.C.B.: RFKZ0239 (1x)
 - between Digital I/F P.C.B. and FL Drive P.C.B.: RFKZ0238 (1x)



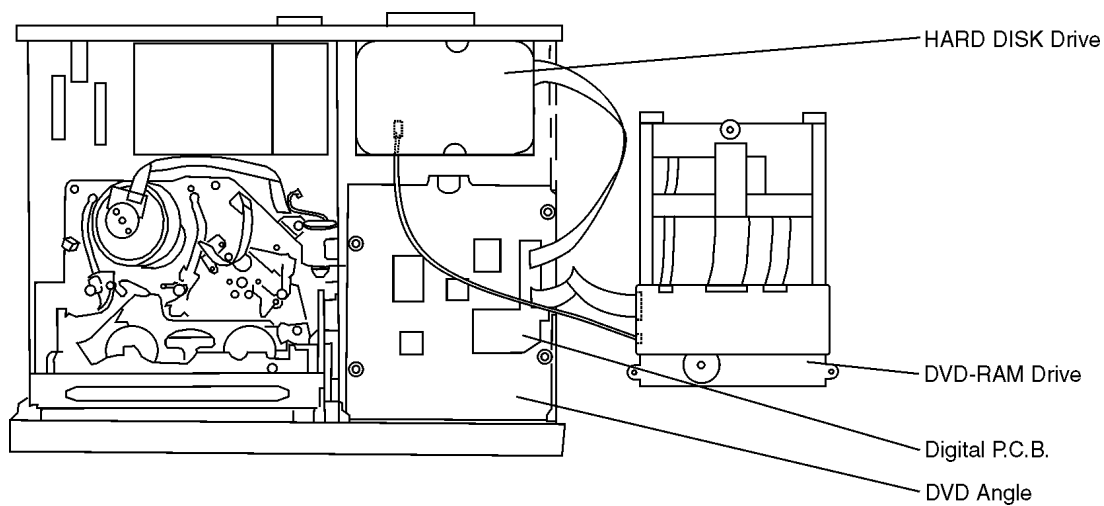
16.4. CHECKING AND REPAIRING OF DVD-RAM DRIVE

1. Top Case

- Remove 4 Screws (A) on side and 3 Screws (B) on rear side
- Remove Top Case

2. DVD-RAM Drive

- Take out HDD FFC from HDD Angle sideways
- Remove 3 Screws (B)
- Lift up DVD-RAM Drive slightly and put it upside down



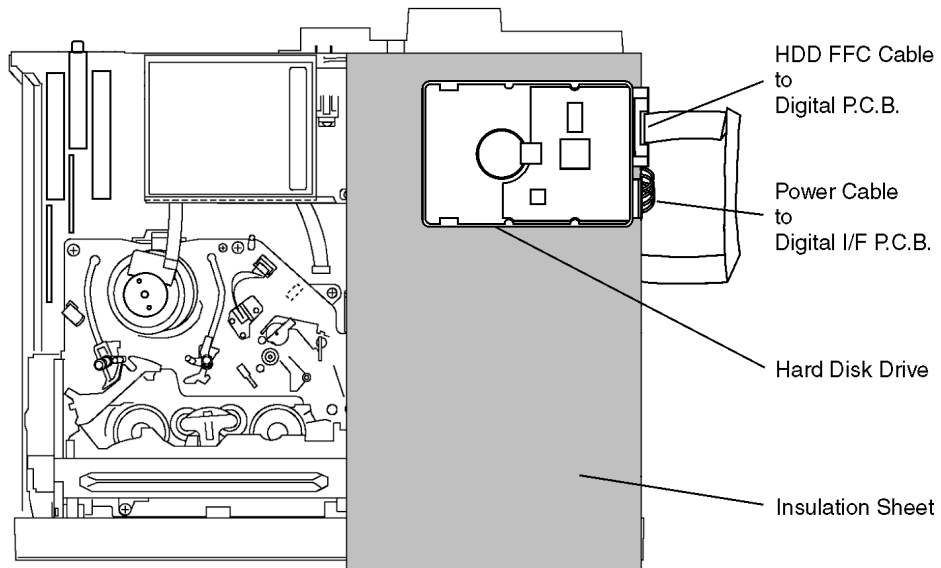
16.5. CHECKING AND REPAIRING OF HARD DISC DRIVE

1. Top Case

- Remove 4 Screws (A) on side and 3 Screws (B) on rear side
- Remove Top Case

2. Hard Disc Drive

- Take out HDD FFC from HDD Angle sideways
- Remove 2 Screws on HDD Angle
- Lift up HDD Angle together with Hard Disc Drive
- Put HDD with HDD Angle up side down so as not give a shock to HDD
- Remove 4 Screws from Hard Disc Drive



16.6. CHECKING AND REPAIRING OF SD CARD P.C.B.

1. Top Case

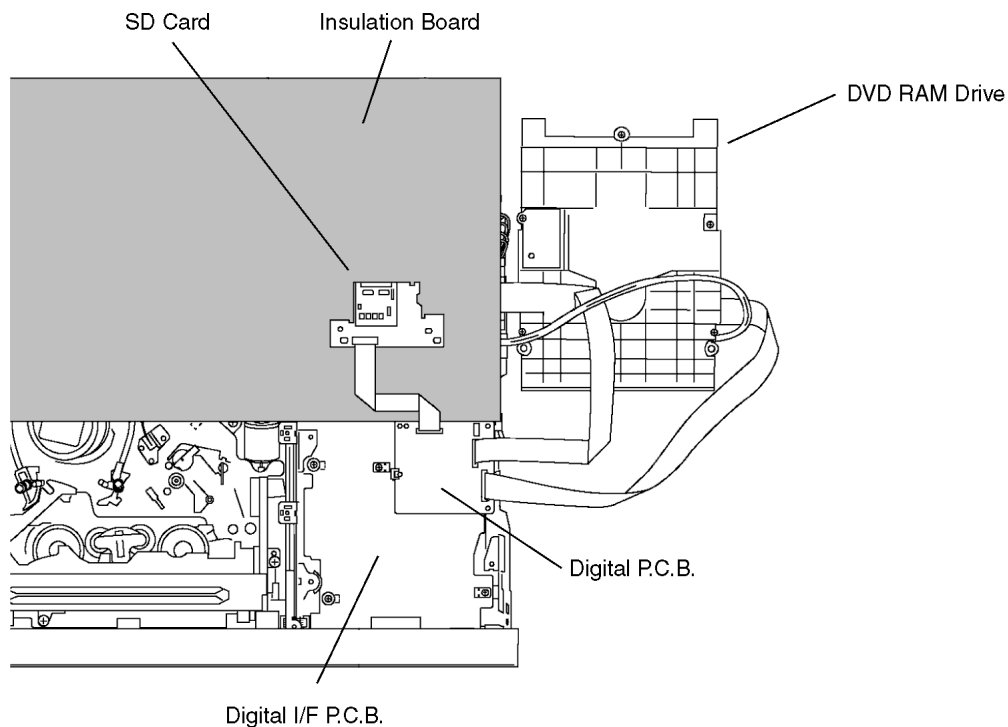
- Remove 4 Screws (A) on side and 3 Screws (B) on rear side
- Remove Top Case

2. DVD-RAM

- Take out HDD FFC from HDD Angle sideways
- Remove 3 Screws (B)
- Lift up DVD-RAM Drive slightly
- Remove 4 Screws (A)
- Disconnect 2 Connectors from Digital P.C.B.
- Remove DVD Angle
- Connect 2 Connectors to Digital P.C.B.

3. SD Card P.C.B.

- Remove 2 Screws



17 (DVD) CAUTION AFTER REPLACING PARTS

17.1. (DVD) AFTER REPLACING THE RAM DRIVE

After replacing of RAM drive unit, TEST mode is not necessary. Please confirm operation for RAM drive.
In this case, all parameters are initialized.

17.2. (DVD) AFTER REPLACING THE TIMER MICROPROCESSOR

When the unit does not operate normally after replacing the Timer Microprocessor or Main P.C.B. with new one, reset Timer Microprocessor.

| Step | Operation | Descriptions |
|------|---|--|
| 1 | While power is ON, short IC37508-4 pin (RESET_OUT) and the GND momentarily. | "RESET (L)" is transmitted to the XRESET terminal of Timer Microprocessor (IC37501-11 pin), then the unit operates normally. |

17.3. (DVD) AFTER REPLACING EEPROM (IC37502)

IC37502 has clock setting data, Tuning data, Self-Diagnosis data (DVD & VHS) and VHS PG Shifter adjustment data.
Therefore after replacing IC37502, PG Shifter should be adjusted (refer to 18.1).

18 (VHS) CAUTION AFTER REPLACING PARTS

PG Shifter Automatic Adjustment and X-VALUE & LINEARITY (P2 and P3 Posts) ADJUSTMENT should be performed after replacing DD Cylinder, EEPROM (IC37502) or Digital I/F P.C.B.

Note:

The "X-VALUE & LINEARITY (P2 and P3 Posts) ADJUSTMENT" is not necessary after only replacement of EEPROM (IC37502) or Digital I/F P.C.B.

18.1. ADJUSTMENT PROCEDURES AFTER REPLACING DD CYLINDER, VHS MICROPROCESSOR OR MAIN P.C.B

PG SHIFTER ADJUSTMENT PROCEDURE

| PROCEDURE | F.I.P. DISPLAY |
|---|------------------------------|
| Turn on the Service Mode 1. Press the FF key and the EJECT key simultaneously for more than 3 seconds. | 00000 |
| Activate the Service Mode 2 2. While keep pressing FF key, press the EJECT key twice. | 20000 |
| Activate the Entering Mode. 3. Press the EJECT key for more than 3 seconds. | 2 00 |
| Set the Mode 2. 4. Press the CH UP key once. | 2 100 |
| Insert the alignment cassette tape (VFJ8125H3F) 5. The PG Shifter Adjustment starts automatically. | 2 100 |
| When the sequence of the automatic adjustment has been terminated, the following action has been made. ● SUCCEED: The cassette tape is ejected. ● ERROR: The "F20", "F21", "F22" or "F23" is displayed. Refer to next PG Shifter Adjustment Self-Diagnosis Indication Table regarding the details of the indications. | |
| Exit from Service Mode. 6. Press FF and EJECT keys simultaneously in 6 times. Then the FIP becomes normal indication. | 10:00 (Normal Indication) |

PG SHIFTER AUTOMATIC ADJUSTMENT SELF-DIAGNOSIS INDICATION

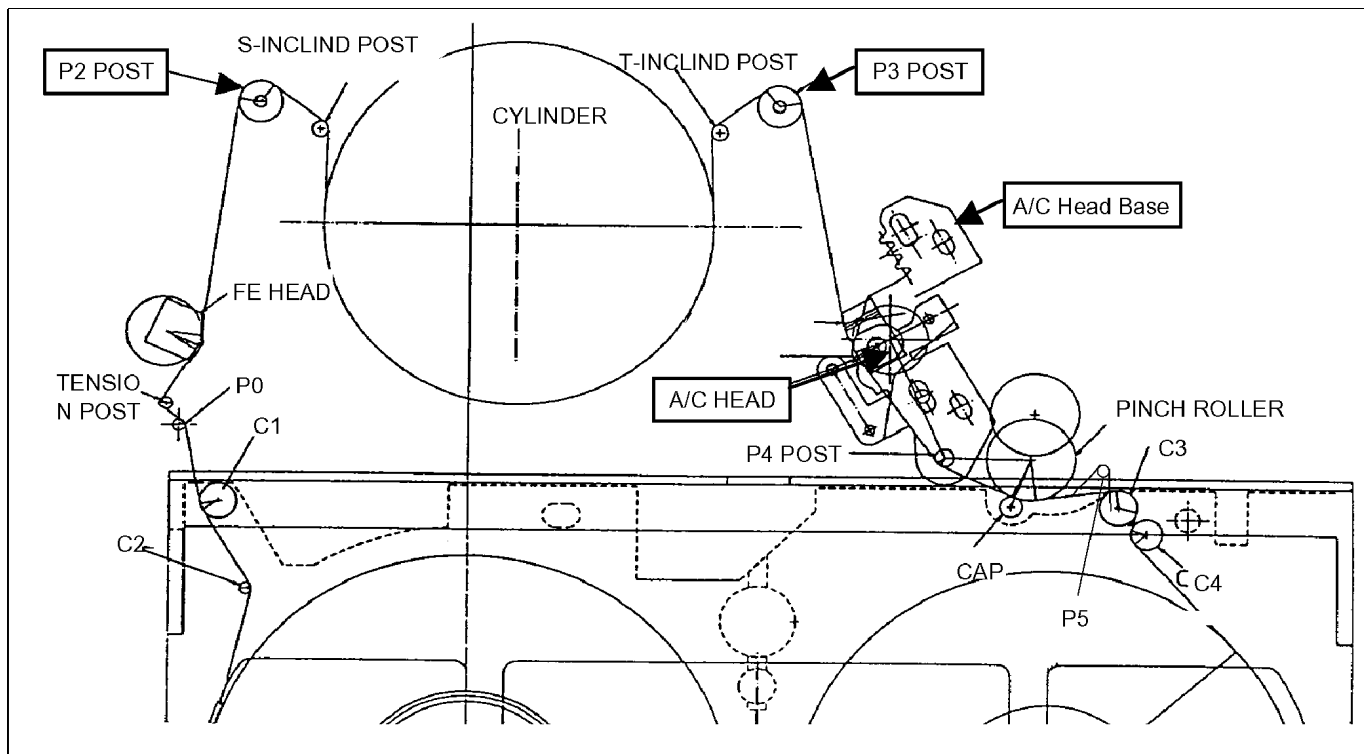
| | |
|-----|--|
| F20 | NG1 in the PG Shifter Automatic Adjustment (The cylinder rotation is unstable during the automatic adjustment.) |
| F21 | NG2 in the PG Shifter Automatic Adjustment (The vertical sync signal is lacked while over 5 seconds on the alignment tape.) |
| F22 | NG3 in the PG Shifter Automatic Adjustment (The installing position of Heads to the cylinder is out of specification.) |
| F23 | NG4 in the PG Shifter Automatic Adjustment (The servo is not locked to the cylinder for more than 10 sec.) |

NOTE:

When DD Cylinder was replaced, the Tape Interchangeability adjustment (X-Value Adjustment, P2 and P3 Posts Adjustment) shown below should be performed after the PG Shifter Automatic Adjustment.

18.2. (VHS) X-VALUE & LINEARITY (P2 AND P3 POSTS) ADJUSTMENT

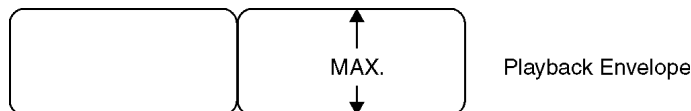
1. Set the Auto Tracking to off.
 - a. Press the FF key and the EJECT key simultaneously for more than 3 seconds to enter Service Mode.
 - b. While keep pressing FF key, press the EJECT key twice to activate Service Mode 2, then Auto-Tracking is turned off.
2. Perform the X-VALUE ADJUSTMENT



18.2.1. (VHS) X-VALUE ADJUSTMENT

1. After turning off the Auto tracking, playback the alignment Tape and press [VHS CH UP] and [VHS CH DOWN] keys simultaneously to adjust the tracking to FIX value.
2. Adjust A/C Head Base so that the envelope becomes maximum level. (It is described on “5-2. Tape Interchangeability Adjustment” in “R4 Mechanism” that is separated volume.)

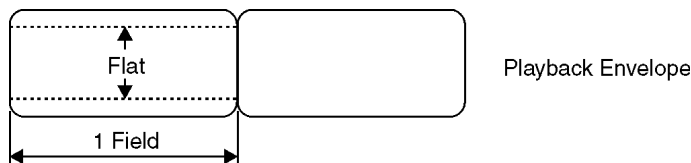
| | |
|---------------------------------|--------------------|
| Alignment Tape | VFJ8125H3F |
| Test Point of Playback Envelope | TW3001 (or TW4502) |



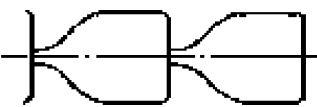



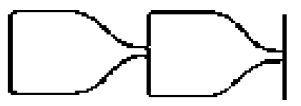

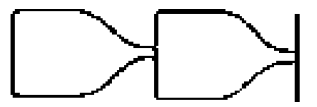

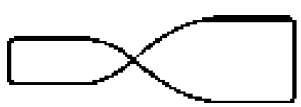
18.2.2. (VHS) LINEARITY ADJUSTMENT

1. After turning off the Auto tracking, playback the alignment Tape and press [VHS CH UP] and [VHS CH DOWN] keys simultaneously to adjust the tracking to FIX value.
2. Adjust the LINEARITY so that the envelope is flat when moving tracking to (+) and (-) directions.

| | |
|---------------------------------|--------------------|
| Alignment Tape | VFJ8125H3F |
| Test Point of Playback Envelope | TW3001 (or TW4502) |



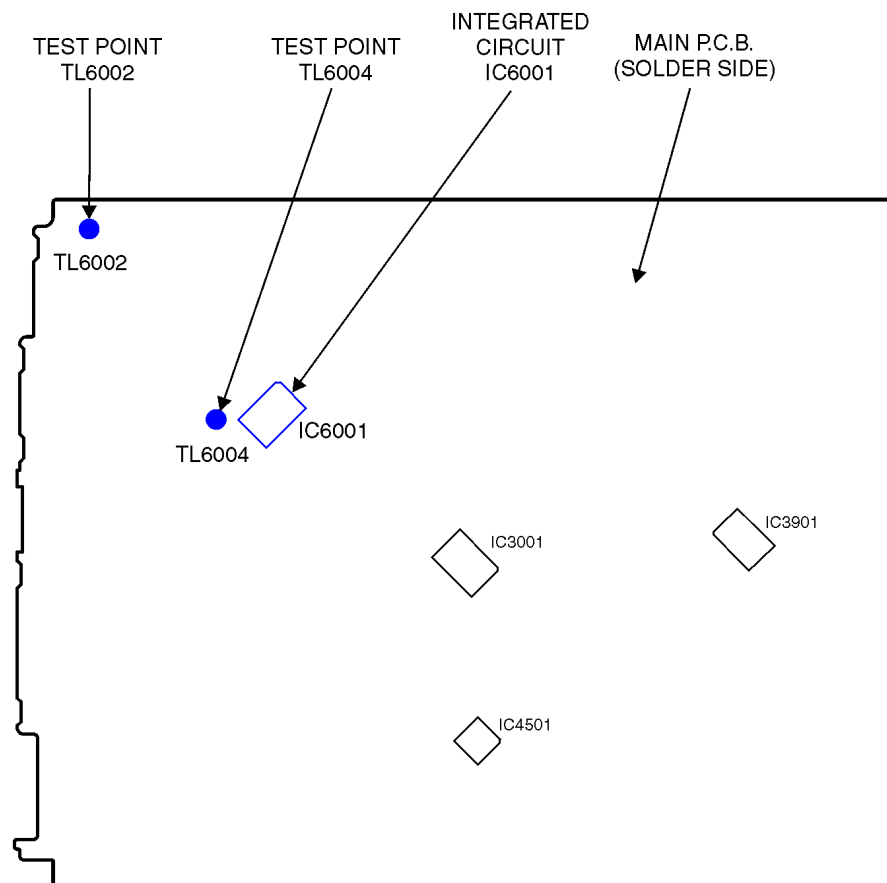
● Main symptoms and Adjustment point

| Envelope | Post Name | | Adjustment Method |
|---|-----------|---|--|
|  | P2 Post |  | Turn P2 Post counter-clockwise (Approx. 1/2 revolution) |
|  | P2 Post |  | Turn P2 Post clockwise (Approx. 1/4 revolution) |
|  | P3 Post |  | Turn P3 Post clockwise (Approx. 1/2 revolution) |
|  | P3 Post |  | Turn P3 Post counter-clockwise (Approx. 1/4 revolution) |
|  | P2 Post | P3 Post | Turn P2 Post clockwise (Less than 1 revolution) Turn P3 Post counter-clockwise (Less than 1 revolution) |

18.3. (VHS) CAUTION AFTER REPLACING VHS MICROPROCESSOR (IC6001)

After replacing VHS Microprocessor IC6001, if the unit does not operate normally, reset IC6001.

1. Turn on the power.
2. Short out circuit between TL6004 (RESET_L) and TL6002 (GND) momentarily to reset IC6001.



19 (DVD) STANDARD INSPECTION SPECIFICATIONS AFTER MAKING REPAIRS

After making repairs, we recommend performing the following inspection, to check normal operation.

| No. | Procedure | Item to Check |
|-----|--|---|
| 1 | Turn on the power, and confirm items pointed out. | Items pointed out should reappear. |
| 2 | Insert RAM disc. | The Panasonic RAM disc should be recognized. |
| 3 | Enter the EE (TU IN / AV IN - AV OUT) mode. | No abnormality should be seen in the picture, sound or operation. |
| 4 | Perform auto recording and playback for one minute using the RAM disc. | No abnormality should be seen in the picture, sound or operation. *Panasonic DVD-RAM disc should be used when recording and playback. |
| 5 | If a problem is caused by a VCD, DVD-R, DVD-Video, Audio-CD, or MP3, playback the test disc. | No abnormality should be seen in the picture, sound or operation. |
| 6 | After checking and making repairs, upgrade the firmware to the latest version. | Make sure that [FIRM_SUCCESS] appears in the FL displays. *[UNSUPPORT] display means the unit is already updated to newest same version. Then version up is not necessary. |
| 7 | Transfer [9][9] in the service mode setting, and initialize the service settings (return various settings and error information to their default values. The laser time is not included in this initialization). | Make sure that [CLR SERV] appears in the FL display. After checking it, turn the power off. |
| 8 | When replacing of RAM drive, transfer [9] [5] in the service mode setting to delete Laser used time. | Make sure that [CLR LASER] appears in the FL display. After that, turn power off. |

Use the following checklist to establish the judgement criteria for the picture and sound.

| Item | Contents | Check | Item | Contents | Check |
|---------|--------------------|-------|-------|--|-------|
| Picture | Block noise | | Sound | Distorted sound | |
| | Crosscut noise | | | Noise (static, background noise, etc.) | |
| | Dot noise | | | The sound level is too low. | |
| | Picture disruption | | | The sound level is too high. | |
| | Not bright enough | | | The sound level changes. | |
| | Too bright | | | | |
| | Flickering color | | | | |
| | Color fading | | | | |

20 VOLTAGE AND WAVEFORM CHART

NOTE:

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.

Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

| Ref.No. | IC11201 | | | | | | | | IC11301 | | | | | | | |
|---------|---------|------|------|-------|------|--------|--------|--|---------|------|------|--|--|--|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | 7 | 8 | | C | A | R | | | | | |
| Stop | 2,40 | 1,60 | 0,00 | 14,00 | 0,00 | 280,00 | 280,00 | | 8,50 | 0,00 | 2,47 | | | | | |
| Play | 2,40 | 1,60 | 0,00 | 14,00 | 0,00 | 280,00 | 280,00 | | 8,50 | 0,00 | 2,47 | | | | | |
| Rec. | 2,40 | 1,60 | 0,00 | 14,00 | 0,00 | 280,00 | 280,00 | | 8,50 | 0,00 | 2,47 | | | | | |

| Ref.No. | IC11501 | | | | | | | | IC15001 | | | | | | | |
|---------|---------|------|------|------|------|------|------|-------|---------|------|------|------|------|--|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | | | |
| Stop | 12,40 | 4,50 | 1,24 | 1,29 | 0,79 | 0,00 | 6,23 | 12,39 | 0,04 | 0,02 | 0,02 | 5,04 | 5,06 | | | |
| Play | 12,40 | 4,50 | 1,24 | 1,29 | 0,79 | 0,00 | 6,23 | 12,39 | 0,04 | 0,02 | 0,02 | 5,04 | 5,06 | | | |
| Rec. | 12,40 | 4,50 | 1,24 | 1,29 | 0,79 | 0,00 | 6,23 | 12,39 | 0,04 | 0,02 | 0,02 | 5,04 | 5,06 | | | |

| Ref.No. | IC15002 | | | | | | | | IC15003 | | | | | | | |
|---------|---------|------|------|------|------|------|------|-----|---------|------|------|------|------|------|------|-------|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Stop | 12,42 | 0,02 | 1,35 | 4,23 | 0,02 | 1,12 | 0,83 | 3,5 | 12,43 | 4,52 | 1,26 | 1,31 | 1,25 | 0,00 | 7,30 | 12,41 |
| Play | 12,42 | 0,02 | 1,35 | 4,23 | 0,02 | 1,12 | 0,83 | 3,5 | 12,43 | 4,52 | 1,26 | 1,31 | 1,25 | 0,00 | 7,30 | 12,41 |
| Rec. | 12,42 | 0,02 | 1,35 | 4,23 | 0,02 | 1,12 | 0,83 | 3,5 | 12,43 | 4,52 | 1,26 | 1,31 | 1,25 | 0,00 | 7,30 | 12,41 |

| Ref.No. | IC15004 | | | | | | | | | | | | | | | |
|---------|---------|------|------|------|------|------|-------|-------|--|--|--|--|--|--|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | |
| Stop | 12,43 | 4,58 | 1,26 | 1,26 | 0,84 | 0,00 | 10,58 | 12,43 | | | | | | | | |
| Play | 12,43 | 4,58 | 1,26 | 1,26 | 0,84 | 0,00 | 10,58 | 12,43 | | | | | | | | |
| Rec. | 12,43 | 4,58 | 1,26 | 1,26 | 0,84 | 0,00 | 10,58 | 12,43 | | | | | | | | |

| Ref.no. | IC2501 | | | | | | | | | | | | | | | | | | | |
|---------|--------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Stop | 12,24 | 0,23 | 0,00 | 0,22 | 0,00 | 0,00 | 16,05 | 0,00 | 2,73 | 1,72 | 1,70 | 0,62 | 1,33 | 2,40 | 2,43 | 2,43 | 2,43 | 1,25 | 4,96 | 0,74 |
| Play | 12,24 | 0,23 | 0,00 | 0,23 | 0,00 | 0,00 | 14,54 | 0,00 | 2,74 | 1,72 | 1,69 | 0,61 | 1,37 | 2,38 | 2,43 | 2,43 | 2,43 | 1,25 | 4,96 | 3,15 |
| REC | 12,24 | 0,23 | 0,00 | 0,23 | 0,00 | 0,00 | 14,57 | 0,00 | 2,72 | 1,72 | 1,69 | 0,61 | 1,35 | 2,39 | 2,43 | 2,43 | 2,43 | 1,26 | 4,96 | 3,14 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 21 | 22 | 23 | 24 | 25 | | | | | | | | | | | | | | | |
| Stop | 12,25 | 0,73 | 0,73 | 0,00 | 0,73 | | | | | | | | | | | | | | | |
| Play | 12,24 | 3,15 | 3,15 | 0,00 | 3,14 | | | | | | | | | | | | | | | |
| REC | 12,24 | 3,13 | 3,14 | 0,00 | 3,13 | | | | | | | | | | | | | | | |

| Ref.no. | IC3001 | | | | | | | | | | | | | | | | | | | |
|---------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Stop | 0,00 | 0,00 | 0,05 | 5,01 | 2,07 | 2,56 | 2,81 | 1,96 | 1,90 | 2,26 | 2,08 | 1,64 | 0,00 | 1,39 | 2,77 | 3,31 | 2,77 | 1,98 | 2,77 | 0,00 |
| Play | 0,00 | 0,00 | 0,05 | 5,01 | 2,07 | 2,55 | 2,81 | 1,83 | 1,68 | 2,90 | 3,05 | 0,98 | 0,00 | 2,64 | 2,77 | 3,33 | 2,75 | 1,27 | 2,77 | 0,00 |
| REC | 0,00 | 0,00 | 0,05 | 5,01 | 2,05 | 2,57 | 2,81 | 2,06 | 2,01 | 1,88 | 2,08 | 1,70 | 0,00 | 1,40 | 2,77 | 3,30 | 2,77 | 2,14 | 2,77 | 0,00 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| Stop | 0,00 | 4,96 | 2,29 | 0,40 | 2,11 | 2,97 | 0,00 | 0,00 | 1,62 | 2,22 | 0,14 | 2,24 | 2,10 | 1,98 | 3,90 | 2,39 | 3,90 | 2,15 | 1,48 | 2,08 |
| Play | 2,77 | 4,39 | 2,30 | 2,80 | 2,11 | 2,76 | 1,63 | 0,00 | 1,60 | 2,82 | 0,37 | 2,25 | 2,05 | 2,78 | 2,72 | 2,15 | 2,82 | 2,17 | 1,46 | 2,10 |
| REC | 2,77 | 4,96 | 2,30 | 0,35 | 2,11 | 2,73 | 0,00 | 0,00 | 1,46 | 2,85 | 0,28 | 2,25 | 1,86 | 1,79 | 2,80 | 2,15 | 2,80 | 2,13 | 1,46 | 2,07 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| Stop | 2,56 | 1,95 | 2,10 | 0,00 | 3,06 | 3,06 | 0,00 | 0,12 | 3,35 | 4,97 | 2,10 | 4,97 | 2,54 | 0,00 | 1,04 | 0,00 | 2,15 | 1,99 | 4,94 | 4,94 |
| Play | 2,16 | 1,96 | 2,11 | 0,00 | 3,05 | 2,05 | 4,97 | 0,13 | 3,04 | 4,97 | 1,85 | 4,97 | 2,54 | 0,00 | 1,94 | 0,00 | 2,16 | 2,03 | 4,94 | 4,94 |
| REC | 2,55 | 1,96 | 2,10 | 0,00 | 3,06 | 0,00 | 0,00 | 0,13 | 3,06 | 4,97 | 1,88 | 4,97 | 0,00 | 0,00 | 1,94 | 0,00 | 0,00 | 1,97 | 4,89 | 0,00 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| Stop | 0,00 | 2,35 | 2,19 | 2,18 | 2,18 | 2,14 | 0,33 | 2,42 | 1,97 | 2,69 | 2,15 | 0,13 | 3,99 | 3,92 | 2,75 | 2,21 | 2,82 | 0,01 | 0,00 | 2,33 |
| Play | 0,00 | 2,10 | 2,15 | 2,31 | 2,19 | 2,36 | 0,33 | 2,42 | 1,96 | 2,42 | 2,16 | 0,13 | 4,00 | 3,94 | 2,74 | 2,16 | 2,82 | 0,00 | 0,00 | 2,57 |
| REC | 0,00 | 0,00 | 0,00 | 2,30 | 2,19 | 0,00 | 0,00 | 2,43 | 0,00 | 2,69 | 2,16 | 0,13 | 4,01 | 3,97 | 2,74 | 2,16 | 2,82 | 0,00 | 0,00 | 2,54 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| Stop | 2,66 | 0,00 | 3,22 | 0,00 | 2,23 | 2,23 | 2,23 | 0,00 | 2,22 | 2,22 | 2,22 | 5,01 | 0,58 | 2,52 | 2,50 | 0,00 | 0,00 | 2,33 | 0,00 | 2,57 |
| Play | 4,73 | 0,00 | 2,96 | 4,92 | 2,23 | 0,00 | 0,00 | 0,00 | 0,00 | 2,22 | 2,22 | 5,01 | 0,51 | 2,52 | 2,50 | 0,00 | 0,00 | 2,54 | 0,00 | 2,55 |
| REC | 4,66 | 0,00 | 3,13 | 4,87 | 2,36 | 0,00 | 2,34 | 0,00 | 0,01 | 0,00 | 0,01 | 5,01 | 0,60 | 2,53 | 2,50 | 0,00 | 0,00 | 2,31 | 0,00 | 2,57 |

| Ref.no. | IC3002 | | | | | | | | IC3003 | | | | | | | |
|---------|--------|------|------|------|------|------|------|------|--------|------|------|------|------|------|------|------|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Stop | 5,04 | 0,00 | 0,00 | 3,47 | 4,69 | 0,00 | 0,01 | 5,59 | 2,78 | 0,00 | 2,80 | 0,00 | 2,79 | 5,00 | 2,05 | 0,00 |
| Play | 5,04 | 0,00 | 0,00 | 3,47 | 4,69 | 0,00 | 0,01 | 5,58 | 2,79 | 4,88 | 2,78 | 0,00 | 2,79 | 5,03 | 2,05 | 0,00 |
| REC | 5,04 | 0,00 | 0,00 | 3,47 | 4,67 | 0,02 | 0,02 | 5,53 | 2,78 | 0,00 | 2,79 | 0,00 | 2,79 | 5,03 | 2,05 | 0,00 |

| Ref.no. | IC3501 | | | | | | | | | | | | | | | |
|---------|--------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | |
| Stop | 2,72 | 4,87 | 2,71 | 4,88 | 2,71 | 4,89 | 1,99 | 0,00 | | | | | | | | |
| Play | 2,71 | 0,01 | 2,72 | 4,88 | 2,70 | 4,89 | 1,99 | 0,00 | | | | | | | | |
| REC | 2,71 | 4,86 | 2,71 | 4,87 | 2,71 | 4,89 | 1,99 | 0,00 | | | | | | | | |

| Ref.no. | IC3502 | | | | | | | | | | | | | | | | | | |
|---------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | | | | | |
| Stop | 4,87 | 0,01 | 4,89 | 3,36 | 3,16 | 4,89 | 2,72 | 2,86 | 2,86 | 2,86 | 0,00 | 3,51 | 3,51 | 2,01 | | | | | |
| Play | 0,01 | 0,01 | 4,89 | 3,37 | 3,14 | 4,89 | 2,48 | 2,02 | 2,02 | 2,02 | 0,00 | 3,53 | 3,53 | 2,01 | | | | | |
| REC | 4,86 | 0,01 | 4,89 | 3,36 | 3,14 | 4,89 | 2,72 | 2,86 | 2,86 | 2,86 | 0,00 | 3,51 | 3,51 | 2,01 | | | | | |

| Ref.no. | IC3901 | | | | | | | | | | | | | | | | | | | |
|---------|--------|------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Stop | 2,03 | 2,50 | 1,57 | 0,00 | 1,56 | 4,95 | 0,00 | 4,95 | 0,55 | 0,04 | 0,00 | 0,53 | 0,00 | 0,00 | 0,04 | 1,56 | 0,55 | 0,00 | 1,68 | 1,71 |
| Play | 2,03 | 0,00 | 1,57 | 0,00 | 0,00 | 4,95 | 0,00 | 4,96 | 0,00 | 0,04 | 0,00 | 0,50 | 0,00 | 0,00 | 0,00 | 1,56 | 0,53 | 0,00 | 1,67 | 1,71 |
| REC | 2,03 | 2,50 | 1,57 | 0,00 | 1,56 | 0,00 | 0,00 | 4,95 | 0,60 | 0,04 | 0,00 | 0,57 | 0,00 | 0,00 | 0,00 | 1,56 | 0,57 | 0,00 | 1,67 | 1,71 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| Stop | 0,00 | 1,69 | 1,20 | 1,26 | 4,95 | 0,00 | 10,67 | 1,01 | 0,00 | 2,41 | 1,55 | 0,00 | 1,55 | 0,00 | 1,56 | 0,05 | 1,56 | 0,02 | 2,37 | 4,95 |
| Play | 0,00 | 1,69 | 1,19 | 1,25 | 4,95 | 1,02 | 10,67 | 1,01 | 0,00 | 2,40 | 0,03 | 0,00 | 1,56 | 0,00 | 1,56 | 0,02 | 1,56 | 0,02 | 2,37 | 0,02 |
| REC | 0,00 | 1,69 | 1,89 | 1,25 | 4,95 | 1,02 | 10,66 | 1,01 | 0,00 | 2,40 | 1,55 | 0,00 | 1,55 | 0,00 | 1,56 | 0,05 | 1,56 | 0,02 | 2,36 | 4,95 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| Stop | 1,55 | 4,96 | 2,90 | 0,00 | 2,90 | 11,24 | 1,75 | 2,00 | 4,54 | 4,49 | 4,50 | 4,50 | 4,50 | 4,50 | 4,50 | 4,50 | 9,10 | 0,00 | 4,50 | 4,50 |
| Play | 0,02 | 4,96 | 2,00 | 0,00 | 2,90 | 11,24 | 1,60 | 2,00 | 4,53 | 4,49 | 4,50 | 4,50 | 4,50 | 4,50 | 4,50 | 4,50 | 9,09 | 4,50 | 4,50 | 4,50 |
| REC | 1,55 | 4,96 | 2,90 | 0,00 | 2,90 | 11,24 | 1,67 | 2,00 | 4,53 | 4,49 | 4,50 | 4,50 | 4,50 | 4,50 | 4,50 | 4,50 | 9,09 | 4,50 | 4,50 | 4,50 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| Stop | 4,50 | 4,50 | 4,50 | 0,00 | 8,96 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,54 | 4,54 | 4,54 | 4,54 | 0,00 | 4,53 | 9,14 | 0,00 | 4,55 | 0,00 |
| Play | 4,50 | 4,50 | 4,50 | 4,50 | 8,96 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,54 | 4,54 | 4,54 | 4,54 | 0,00 | 4,53 | 9,14 | 4,55 | 4,55 | 0,00 |
| REC | 4,50 | 4,50 | 4,50 | 4,50 | 8,96 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,54 | 4,54 | 4,54 | 4,54 | 0,00 | 4,54 | 9,14 | 4,55 | 4,55 | 0,00 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| Stop | 2,10 | 4,96 | 2,02 | 4,05 | 3,26 | 4,70 | 3,77 | 4,67 | 4,53 | 0,04 | 2,03 | 0,82 | 1,87 | 4,96 | 1,62 | 0,00 | 1,87 | 0,04 | 1,59 | 2,50 |
| Play | 2,10 | 4,96 | 2,01 | 0,00 | 3,28 | 4,71 | 3,77 | 4,62 | 4,47 | 0,00 | 2,03 | 0,81 | 1,87 | 4,96 | 1,61 | 0,00 | 1,87 | 0,04 | 1,59 | 2,50 |
| REC | 2,09 | 4,96 | 2,00 | 4,96 | 3,25 | 4,70 | 3,77 | 4,66 | 4,53 | 0,04 | 2,03 | 0,81 | 1,87 | 4,96 | 1,61 | 0,00 | 1,87 | 0,04 | 1,59 | 2,50 |

| Ref.no. | IC3902 | | | | | | | | | | IC3903 | | | | | | | | | |
|---------|--------|------|------|------|------|------|------|------|--|--|--------|------|------|------|------|------|------|------|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| Stop | 2,74 | 0,05 | 2,75 | 0,04 | 2,75 | 4,96 | 2,01 | 0,00 | | | 1,65 | 0,05 | 1,47 | 0,04 | 1,47 | 4,96 | 0,92 | 0,00 | | |
| Play | 2,74 | 0,05 | 2,75 | 0,04 | 2,75 | 4,96 | 2,01 | 0,00 | | | 1,65 | 0,05 | 1,47 | 0,04 | 1,47 | 4,96 | 0,92 | 0,00 | | |
| REC | 2,74 | 0,05 | 2,75 | 0,04 | 2,75 | 4,95 | 2,01 | 0,00 | | | 1,64 | 0,05 | 1,47 | 0,04 | 1,46 | 4,95 | 0,92 | 0,00 | | |

| Ref.no. | IC3904 | | | | | | | | | | IC3906 | | | | | | | | | |
|---------|--------|------|------|------|------|------|------|------|--|--|--------|------|------|------|------|------|------|------|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| Stop | 1,42 | 0,05 | 1,47 | 0,04 | 1,47 | 4,96 | 0,70 | 0,00 | | | 4,98 | 0,00 | 0,00 | 3,41 | 4,46 | 0,00 | 0,00 | 5,53 | | |
| Play | 1,42 | 0,05 | 1,47 | 0,04 | 1,47 | 4,96 | 0,70 | 0,00 | | | 4,98 | 0,00 | 0,00 | 3,41 | 4,45 | 0,00 | 0,00 | 5,53 | | |
| REC | 1,42 | 0,05 | 1,47 | 0,04 | 1,47 | 4,96 | 0,70 | 0,00 | | | 4,98 | 0,00 | 0,00 | 3,41 | 4,43 | 0,00 | 0,00 | 5,51 | | |

| Ref.no. | IC4501 | | | | | | | | | | | | | | | | | | | |
|---------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Stop | 2,39 | 0,00 | 2,39 | 0,00 | 0,04 | 2,50 | 2,01 | 0,00 | 0,00 | 0,00 | 0,00 | 2,02 | 0,00 | 0,00 | 0,00 | 2,47 | 0,47 | 2,50 | 2,49 | 2,05 |
| Play | 2,38 | 0,00 | 2,38 | 0,00 | 0,03 | 2,48 | 2,02 | 0,00 | 0,00 | 0,00 | 0,00 | 0,02 | 0,00 | 0,00 | 0,00 | 2,49 | 0,51 | 2,52 | 2,52 | 0,00 |
| REC | 2,36 | 0,00 | 2,36 | 0,00 | 0,06 | 2,47 | 1,99 | 0,00 | 0,00 | 0,00 | 0,00 | 1,98 | 0,00 | 0,00 | 0,00 | 2,44 | 0,45 | 2,47 | 5,46 | 1,98 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| Stop | 2,05 | 2,05 | 0,00 | 2,05 | 5,01 | 2,06 | 0,00 | 4,24 | 1,81 | 1,81 | 0,00 | 2,49 | 2,50 | 0,51 | 2,47 | 4,80 | 1,68 | 0,00 | 0,07 | 5,01 |
| Play | 0,00 | 0,66 | 0,00 | 0,66 | 5,00 | 0,10 | 2,57 | 4,20 | 1,81 | 1,81 | 1,78 | 2,53 | 2,53 | 0,54 | 2,50 | 0,00 | 1,68 | 0,00 | 0,07 | 5,00 |
| REC | 1,90 | 1,98 | 0,00 | 2,06 | 4,96 | 2,04 | 0,00 | 4,21 | 3,97 | 3,97 | 1,09 | 2,46 | 2,47 | 0,49 | 2,44 | 0,00 | 1,67 | 0,00 | 0,06 | 4,96 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| Stop | 0,00 | 0,03 | 3,99 | 3,28 | 1,58 | 1,87 | 2,49 | 2,49 | 0,18 | 0,88 | 5,89 | 5,99 | 6,03 | 0,00 | 0,00 | 0,00 | 6,03 | 11,87 | 6,18 | 0,00 |
| Play | 0,05 | 0,04 | 4,00 | 3,28 | 1,54 | 4,88 | 2,53 | 2,53 | 0,18 | 0,87 | 5,88 | 5,96 | 6,05 | 0,01 | 0,00 | 0,01 | 6,03 | 11,87 | 6,18 | 0,00 |
| REC | 0,00 | 0,00 | 3,98 | 3,29 | 1,58 | 4,82 | 2,47 | 2,47 | 0,18 | 0,87 | 5,85 | 5,95 | 5,95 | 0,01 | 0,00 | 0,01 | 5,95 | 11,87 | 6,09 | 0,00 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 61 | 62 | 63 | 64 | | | | | | | | | | | | | | | | |
| Stop | 2,49 | 2,42 | 0,00 | 0,00 | | | | | | | | | | | | | | | | |
| Play | 2,48 | 2,41 | 0,00 | 0,00 | | | | | | | | | | | | | | | | |
| REC | 2,46 | 2,39 | 0,00 | 0,00 | | | | | | | | | | | | | | | | |

| Ref.no. | IC6001 | | | | | | | | | | | | | | | | | | | |
|---------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Stop | 0,00 | 0,00 | 4,89 | 0,00 | 4,86 | 4,86 | 4,71 | 4,69 | 3,24 | 0,00 | 0,00 | 3,32 | 0,00 | 4,86 | 3,79 | 4,88 | 0,00 | 2,48 | 0,00 | 0,20 |
| Play | 0,00 | 0,01 | 4,89 | 0,00 | 4,85 | 4,85 | 4,80 | 4,71 | 1,82 | 4,85 | 4,58 | 0,13 | 0,00 | 4,83 | 3,80 | 0,00 | 0,00 | 2,21 | 2,53 | 0,02 |
| REC | 0,00 | 0,01 | 4,87 | 0,00 | 4,82 | 4,82 | 3,90 | 4,45 | 3,12 | 4,82 | 4,56 | 3,30 | 0,00 | 4,82 | 3,82 | 4,86 | 0,00 | 2,81 | 0,00 | 4,85 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| Stop | 4,86 | 0,00 | 4,23 | 0,00 | 0,00 | 0,00 | 0,00 | 4,82 | 4,89 | 0,00 | 4,90 | 4,90 | 0,00 | 0,00 | 0,00 | 2,95 | 4,92 | 2,13 | 5,03 | 0,00 |
| Play | 4,85 | 0,00 | 4,21 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,90 | 0,00 | 4,90 | 4,90 | 0,00 | 0,00 | 0,00 | 2,95 | 4,92 | 2,13 | 5,03 | 0,00 |
| REC | 4,82 | 0,00 | 4,21 | 0,00 | 0,00 | 4,88 | 0,00 | 0,00 | 4,88 | 0,00 | 4,88 | 4,88 | 0,00 | 4,91 | 0,00 | 2,95 | 4,92 | 2,13 | 5,03 | 0,00 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| Stop | 0,00 | 4,88 | 4,90 | 4,90 | 0,00 | 0,00 | 1,80 | 2,19 | 0,00 | 1,02 | 2,45 | 1,02 | 4,92 | 2,78 | 0,00 | 1,30 | 0,00 | 0,00 | 0,61 | 0,01 |
| Play | 4,87 | 0,00 | 4,91 | 4,90 | 4,88 | 0,00 | 1,81 | 2,20 | 0,00 | 1,88 | 2,45 | 1,85 | 4,91 | 2,02 | 0,00 | 2,10 | 0,00 | 0,00 | 0,38 | 4,86 |
| REC | 0,00 | 4,87 | 4,89 | 4,88 | 0,00 | 0,00 | 1,82 | 2,19 | 0,00 | 0,84 | 2,45 | 0,84 | 4,92 | 2,75 | 0,00 | 1,16 | 0,00 | 0,00 | 0,45 | 0,01 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| Stop | 0,01 | 0,00 | 4,86 | 0,70 | 3,82 | 3,88 | 4,14 | 3,80 | 0,90 | 4,05 | 3,98 | 3,98 | 0,00 | 0,00 | 4,86 | 0,00 | 2,41 | 0,28 | 0,15 | 0,16 |
| Play | 4,15 | 0,00 | 4,86 | 0,97 | 3,80 | 3,85 | 4,14 | 3,89 | 1,38 | 4,06 | 4,90 | 3,04 | 0,00 | 0,00 | 4,68 | 2,50 | 3,90 | 0,24 | 4,94 | 4,94 |
| REC | 0,01 | 0,00 | 4,84 | 0,98 | 3,86 | 3,86 | 4,16 | 3,85 | 1,90 | 4,02 | 3,98 | 3,95 | 0,00 | 0,00 | 4,66 | 2,47 | 2,39 | 0,31 | 4,93 | 4,93 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| Stop | 0,00 | 0,00 | 0,00 | 0,00 | 4,85 | 2,46 | 2,46 | 0,00 | 0,00 | 1,25 | 2,46 | 2,47 | 0,00 | 2,44 | 2,44 | 2,46 | 2,46 | 4,95 | 4,84 | 4,67 |
| Play | 0,00 | 0,00 | 0,00 | 0,00 | 4,81 | 2,46 | 2,46 | 0,00 | 0,00 | 1,27 | 2,46 | 2,47 | 0,00 | 2,44 | 2,44 | 2,46 | 2,45 | 2,49 | 4,86 | 4,67 |
| REC | 0,00 | 0,00 | 0,00 | 0,00 | 4,79 | 2,46 | 2,46 | 0,00 | 0,00 | 1,27 | 2,46 | 2,46 | 0,00 | 2,07 | 2,84 | 2,46 | 2,45 | 4,95 | 4,83 | 4,67 |

| Ref.no. | IC6201 | | | | | | | | | | IC6302 | | | | | | | | | |
|---------|--------|------|------|------|------|--|--|--|--|--|--------|------|------|------|------|--|--|--|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| Stop | 4,91 | 4,91 | 0,00 | 0,00 | 0,00 | | | | | | 4,96 | 0,00 | 4,68 | 5,65 | 0,00 | | | | | |
| Play | 4,91 | 4,91 | 0,00 | 0,00 | 0,00 | | | | | | 4,96 | 0,00 | 4,67 | 5,64 | 0,00 | | | | | |
| REC | 4,90 | 4,90 | 0,00 | 0,00 | 0,00 | | | | | | 4,96 | 0,00 | 4,66 | 5,61 | 0,00 | | | | | |

| Ref.no. | IC7401 | | | | | | | | | | IC7402 | | | | | | | | | |
|---------|--------|------|------|------|------|------|------|------|--|--|--------|------|------|------|------|------|------|------|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| Stop | 4,97 | 0,00 | 0,00 | 3,39 | 5,51 | 0,00 | 0,00 | 5,51 | | | 4,97 | 0,00 | 0,00 | 3,38 | 4,68 | 0,00 | 0,00 | 5,50 | | |
| Play | 4,97 | 0,00 | 0,00 | 3,39 | 5,50 | 0,00 | 0,00 | 5,50 | | | 4,97 | 0,00 | 0,00 | 3,39 | 4,67 | 0,00 | 0,00 | 5,50 | | |
| REC | 4,97 | 0,00 | 0,00 | 3,39 | 5,48 | 0,00 | 0,00 | 5,48 | | | 4,97 | 0,00 | 0,00 | 3,39 | 4,66 | 0,00 | 0,00 | 5,48 | | |

| Ref.no. | IC7405 | | | | | | | | | | | | | | | | | | | |
|---------|--------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | | | | | |
| Stop | 4,97 | 0,00 | 0,00 | 3,39 | 4,95 | 0,00 | 0,00 | 5,50 | | | | | | | | | | | | |
| Play | 4,97 | 0,00 | 0,00 | 3,39 | 4,94 | 0,00 | 0,00 | 5,50 | | | | | | | | | | | | |
| REC | 4,97 | 0,00 | 0,00 | 3,39 | 4,93 | 0,00 | 0,00 | 5,47 | | | | | | | | | | | | |

| Ref.no. | IC7502 | | | | | | | | | | | | | | | | | | | |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Stop | 4,96 | 0,69 | 4,13 | 3,80 | 0,00 | 2,10 | 2,09 | 4,83 | -27,00 | -25,00 | -25,00 | -25,00 | -25,00 | -22,84 | -0,23 | -20,54 | -20,52 | 4,83 | -21,00 | -23,00 |
| Play | 4,96 | 0,69 | 4,13 | 3,80 | 0,00 | 2,10 | 2,09 | 4,83 | -27,00 | -25,00 | -25,00 | -25,00 | -25,00 | -22,84 | -0,23 | -20,54 | -20,52 | 4,83 | -21,00 | -23,00 |
| REC | 4,96 | 0,69 | 4,13 | 3,80 | 0,00 | 2,10 | 2,09 | 4,83 | -27,00 | -25,00 | -25,00 | -25,00 | -25,00 | -22,84 | -0,23 | -20,54 | -20,52 | 4,83 | -21,00 | -23,00 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| Stop | -23,20 | -23,55 | -23,00 | -23,00 | -21,00 | -21,00 | -21,00 | -21,00 | -21,00 | -17,00 | -18,00 | -18,00 | -20,00 | -16,00 | -23,00 | -23,00 | -23,00 | -23,00 | -23,00 | -18,00 |
| Play | -23,20 | -23,55 | -23,00 | -23,00 | -21,00 | -21,00 | -21,00 | -21,00 | -21,00 | -17,00 | -18,00 | -18,00 | -20,00 | -16,00 | -23,00 | -23,00 | -23,00 | -23,00 | -23,00 | -18,00 |
| REC | -23,20 | -23,55 | -23,00 | -23,00 | -21,00 | -21,00 | -21,00 | -21,00 | -21,00 | -17,00 | -18,00 | -18,00 | -20,00 | -16,00 | -23,00 | -23,00 | -23,00 | -23,00 | -23,00 | -18,00 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| Stop | -18,00 | -18,00 | -18,00 | -18,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -25,00 | -25,00 | -25,00 | -25,00 | -25,00 | -25,00 | -25,00 |
| Play | -18,00 | -18,00 | -18,00 | -18,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -25,00 | -25,00 | -25,00 | -25,00 | -25,00 | -25,00 | -25,00 |
| REC | -18,00 | -18,00 | -18,00 | -18,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -28,00 | -25,00 | -25,00 | -25,00 | -25,00 | -25,00 | -25,00 | -25,00 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 61 | 62 | 63 | 64 | | | | | | | | | | | | | | | | |
| Stop | -0,20 | -25,00 | -25,00 | -29,12 | | | | | | | | | | | | | | | | |
| Play | -0,20 | -25,00 | -25,00 | -29,12 | | | | | | | | | | | | | | | | |
| REC | -0,20 | -25,00 | -25,00 | -29,12 | | | | | | | | | | | | | | | | |

| Ref.no. | IC31502 | | | | | | | | | | IC35004 | | | | | | | | | |
|---------|---------|------|------|------|------|--|--|--|--|--|---------|------|------|------|------|------|--|--|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | | | | |
| Stop | 5,82 | 4,93 | 3,25 | 0,00 | 0,00 | | | | | | 0,00 | 1,52 | 4,71 | 2,32 | 0,02 | 2,26 | | | | |
| Play | 5,82 | 4,93 | 3,25 | 0,00 | 0,00 | | | | | | 0,00 | 1,33 | 4,71 | 2,12 | 0,02 | 2,06 | | | | |
| REC | 5,82 | 4,92 | 3,25 | 0,00 | 0,00 | | | | | | 0,00 | 1,52 | 4,71 | 2,33 | 0,02 | 2,26 | | | | |

| Ref.no. | IC35005 | | | | | | | | | | | | | | | | | | |
|---------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | | |
| Stop | 4,71 | 1,88 | 2,01 | 1,41 | 4,53 | 1,41 | 0,02 | 1,88 | 1,88 | 0,02 | 1,86 | 1,86 | 1,39 | 1,40 | 1,39 | 1,87 | | | |
| Play | 4,71 | 1,89 | 2,02 | 1,42 | 4,53 | 1,43 | 0,01 | 1,88 | 1,88 | 0,02 | 1,87 | 1,86 | 1,56 | 1,48 | 1,52 | 1,87 | | | |
| REC | 4,71 | 1,88 | 2,02 | 1,63 | 4,53 | 1,63 | 0,02 | 1,88 | 1,88 | 0,02 | 1,86 | 1,86 | 1,83 | 1,84 | 1,83 | 1,87 | | | |

| Ref.no. | IC37501 | | | | | | | | | | | | | | | | | | | |
|---------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Stop | 4,11 | 4,85 | 2,60 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,73 | 0,91 | 4,96 | 1,49 | 0,00 | 2,03 | 3,32 | 4,96 | 3,26 | 3,21 | 3,21 | 3,10 |
| Play | 4,19 | 4,84 | 2,65 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,73 | 0,91 | 4,96 | 1,51 | 0,00 | 2,04 | 3,34 | 4,96 | 3,26 | 3,18 | 3,16 | 3,31 |
| REC | 4,12 | 4,83 | 2,62 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,73 | 0,91 | 4,96 | 1,50 | 0,00 | 2,03 | 3,33 | 4,96 | 3,25 | 3,17 | 3,17 | 3,31 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| Stop | 0,00 | 0,00 | 0,00 | 3,32 | 0,00 | 0,00 | 0,00 | 4,63 | 4,48 | 0,00 | 0,90 | 1,57 | 1,20 | 4,96 | 2,42 | 0,00 | 0,00 | 3,32 | 3,25 | 3,32 |
| Play | 0,00 | 0,00 | 1,81 | 3,32 | 0,00 | 0,00 | 0,00 | 4,68 | 4,56 | 0,00 | 0,89 | 1,58 | 1,20 | 4,96 | 2,42 | 0,00 | 0,00 | 3,32 | 3,24 | 3,32 |
| REC | 0,00 | 0,00 | 1,81 | 3,32 | 0,00 | 0,00 | 0,00 | 4,70 | 4,59 | 0,00 | 0,90 | 1,58 | 1,20 | 4,96 | 2,42 | 0,00 | 0,00 | 3,32 | 3,32 | 3,32 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| Stop | 0,00 | 0,00 | 3,23 | 3,31 | 0,00 | 0,00 | 4,85 | 4,96 | 4,95 | 4,95 | 4,94 | 4,84 | 0,46 | 0,00 | 0,00 | 0,00 | 4,95 | 0,00 | 0,00 | 4,92 |
| Play | 0,00 | 0,00 | 3,19 | 3,31 | 0,00 | 0,00 | 4,84 | 4,96 | 4,95 | 4,96 | 4,94 | 2,45 | 0,58 | 0,00 | 0,00 | 0,00 | 4,95 | 0,00 | 0,00 | 0,00 |
| REC | 0,00 | 0,00 | 3,20 | 3,30 | 0,00 | 0,00 | 4,85 | 4,96 | 4,95 | 4,95 | 4,94 | 2,55 | 0,12 | 0,00 | 0,00 | 0,00 | 4,95 | 0,00 | 0,00 | 4,93 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| Stop | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,96 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,96 | 0,00 | 0,00 | 4,87 |
| Play | 0,00 | 0,00 | 4,96 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,96 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,96 | 0,00 | 0,00 | 4,86 |
| REC | 0,00 | 0,00 | 4,96 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,96 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,96 | 0,00 | 0,00 | 4,85 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| Stop | 0,00 | 4,84 | 0,00 | 0,00 | 0,00 | 4,93 | 0,00 | NC | NC | NC | NC | NC | 4,96 | 0,00 | 4,85 | 3,82 | 0,00 | 4,86 | 4,67 | 0,00 |
| Play | 0,00 | 4,84 | 0,00 | 0,00 | 0,00 | 4,93 | 0,00 | NC | NC | NC | NC | NC | 4,96 | 0,00 | 4,85 | 3,75 | 0,00 | 4,85 | 4,67 | 4,27 |
| REC | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,93 | 0,00 | NC | NC | NC | NC | NC | 4,96 | 0,00 | 4,84 | 3,82 | 0,00 | 4,85 | 4,67 | 0,00 |
| Ref.no. | | | | | | | | | | | | | | | | | | | | |
| Mode | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | | | | |
| Stop | 4,86 | 4,86 | 0,00 | 0,11 | 0,12 | 4,96 | 3,94 | 4,96 | 1,86 | 1,22 | 0,00 | 4,96 | 2,60 | 0,00 | 0,15 | 1,33 | | | | |
| Play | 4,85 | 4,85 | 0,00 | 4,86 | 4,86 | 4,97 | 3,95 | 4,97 | 0,00 | 1,22 | 0,00 | 4,97 | 2,61 | 0,00 | 0,00 | 1,78 | | | | |
| REC | 4,85 | 4,86 | 0,00 | 4,85 | 4,86 | 4,96 | 3,95 | 4,97 | 1,87 | 1,22 | 0,00 | 4,96 | 2,61 | 0,00 | 0,16 | 2,35 | | | | |

| Ref.no. | IC37502 | | | | | | | | IC37508 | | | | | | | |
|---------|---------|------|------|------|------|------|------|------|---------|---|---|------|------|------|------|------|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | | | |
| Stop | 0,01 | 0,01 | 0,01 | 0,01 | 4,59 | 4,69 | 4,95 | 4,84 | | | | 0,00 | 0,00 | 0,00 | 4,95 | 4,96 |
| Play | 0,01 | 0,01 | 0,01 | 0,01 | 4,57 | 4,69 | 4,95 | 4,83 | | | | 0,00 | 0,00 | 0,00 | 4,95 | 4,96 |
| REC | 0,01 | 0,01 | 0,01 | 0,01 | 4,58 | 4,69 | 4,95 | 4,83 | | | | 0,00 | 0,00 | 0,00 | 4,95 | 4,96 |

| Ref.no. | IC37505 | | | | | | | | IC45001 | | | | | | | |
|---------|---------|------|------|------|------|--|--|--|---------|------|------|------|------|------|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | | | | 1 | 2 | 3 | 4 | 5 | 6 | | |
| Stop | 2,35 | 3,27 | 0,00 | 0,00 | 0,00 | | | | 1,20 | 0,01 | 4,92 | 5,83 | 0,01 | 4,99 | | |
| Play | 2,35 | 3,27 | 0,00 | 0,00 | 0,00 | | | | 1,20 | 0,01 | 4,92 | 5,83 | 0,01 | 4,99 | | |
| REC | 2,35 | 3,27 | 0,00 | 0,00 | 0,00 | | | | 1,20 | 0,01 | 4,92 | 5,83 | 0,02 | 4,99 | | |

| Ref.no. | IC45002 | | | | | | | | IC45003 | | | | | | | |
|---------|---------|------|------|------|------|------|------|-------|---------|------|------|------|------|------|------|-------|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Stop | 4,60 | 3,31 | 3,31 | 0,02 | 3,31 | 3,31 | 4,63 | 10,53 | 10,53 | 4,99 | 4,99 | 0,02 | 3,31 | 3,31 | 3,31 | 12,26 |
| Play | 4,60 | 3,31 | 3,31 | 0,02 | 3,31 | 3,31 | 4,63 | 10,53 | 10,53 | 4,99 | 4,99 | 0,02 | 3,31 | 3,31 | 3,31 | 12,26 |
| REC | 4,60 | 3,31 | 3,31 | 0,02 | 3,31 | 3,31 | 4,63 | 10,53 | 10,53 | 4,99 | 4,99 | 0,02 | 3,31 | 3,31 | 3,31 | 12,26 |

| Ref.No. | P11001 | | | | | | | | | | | | | | | | |
|---------|--------|------|------|------|-------|-------|-------|---|---|----|------|------|------|------|------|------|--|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | |
| Stop | 20,71 | 6,05 | 6,05 | 6,05 | 12,44 | 12,44 | 12,44 | 0 | 0 | 0 | 0,02 | 0,02 | 2,57 | 6,08 | 5,06 | 4,95 | |
| Play | 20,71 | 6,05 | 6,05 | 6,05 | 12,44 | 12,44 | 12,44 | 0 | 0 | 0 | 0,02 | 0,02 | 2,57 | 6,08 | 5,06 | 4,95 | |
| Rec. | 20,71 | 6,05 | 6,05 | 6,05 | 12,44 | 12,44 | 12,44 | 0 | 0 | 0 | 0,02 | 0,02 | 2,57 | 6,08 | 5,06 | 4,95 | |

| Ref.No. | P12001 | | | | | | | | | | P12002 | | | | | | | | | |
|---------|--------|---|------|---|--|--|--|--|--|--|--------|---|------|--|--|--|--|--|--|--|
| Mode | 1 | 2 | 3 | 4 | | | | | | | 1 | 2 | 3 | | | | | | | |
| Stop | 5,07 | 0 | 0,01 | 0 | | | | | | | 6,09 | 0 | 2,57 | | | | | | | |
| Play | 5,07 | 0 | 0,01 | 0 | | | | | | | 6,09 | 0 | 2,57 | | | | | | | |
| Rec. | 5,07 | 0 | 0,01 | 0 | | | | | | | 6,09 | 0 | 2,57 | | | | | | | |

| Ref.no. | Q3002 | | | Q3501 | | | Q3502 | | | Q3503 | | | Q3901 | | | Q3902 | | | Q3903 | | |
|---------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|
| Mode | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C |
| Stop | 1,56 | 2,19 | 5,02 | 2,73 | 2,10 | 0,00 | 2,13 | 1,48 | 0,00 | 2,10 | 2,71 | 4,89 | 4,50 | 0,00 | 0,00 | 0,00 | 0,00 | 4,50 | 4,50 | 4,89 | 4,50 |
| Play | 1,56 | 2,19 | 5,02 | 2,75 | 2,12 | 0,00 | 2,02 | 1,36 | 0,00 | 1,87 | 2,49 | 4,89 | 4,50 | 0,00 | 0,00 | 0,00 | 0,00 | 4,50 | 4,50 | 4,89 | 4,50 |
| Rec | 1,56 | 2,20 | 5,02 | 2,50 | 1,86 | 0,00 | 2,13 | 1,48 | 0,00 | 2,09 | 2,72 | 4,88 | 4,50 | 0,00 | 0,00 | 0,00 | 0,00 | 4,50 | 4,50 | 4,89 | 4,50 |

| Ref.no. | Q3904 | | | Q4001 | | | Q4002 | | | Q4003 | | | Q4004 | | | Q4502 | | | Q4901 | | |
|---------|-------|------|------|-------|-------|------|-------|-------|------|-------|------|------|-------|------|------|-------|-------|-------|-------|-------|-------|
| Mode | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C |
| Stop | 4,50 | 4,90 | 4,50 | 0,00 | 0,74 | 0,01 | 0,00 | 0,74 | 0,00 | 0,00 | 0,36 | 0,37 | 5,60 | 5,60 | 0,02 | 11,97 | 11,25 | 11,92 | 12,01 | 11,28 | 11,94 |
| Play | 4,50 | 4,90 | 4,50 | 0,00 | 0,74 | 0,01 | 0,00 | 0,74 | 0,00 | 0,00 | 0,34 | 0,35 | 5,58 | 5,58 | 0,32 | 11,97 | 11,25 | 11,92 | 12,00 | 11,28 | 11,95 |
| Rec | 4,50 | 4,90 | 4,50 | 0,00 | -7,36 | 0,00 | 0,00 | -7,33 | 0,00 | 0,00 | 0,37 | 1,12 | 5,56 | 2,91 | 1,29 | 11,97 | 11,25 | 11,92 | 12,00 | 11,27 | 11,94 |

| Ref.no. | Q6101 | | | Q6102 | | | Q6103 | | | Q6104 | | | Q6305 | | | Q6401 | | | Q6402 | | |
|---------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|-------|-------|-------|------|-------|
| Mode | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C |
| Stop | 1,64 | 0,99 | 0,00 | 0,90 | 1,62 | 4,91 | 2,65 | 3,24 | 4,91 | 1,65 | 0,99 | 0,00 | 4,94 | 5,69 | 5,63 | 0,00 | 0,00 | 11,94 | 0,00 | 0,00 | 0,00 |
| Play | 1,64 | 0,99 | 0,00 | 0,97 | 1,60 | 4,91 | 2,62 | 3,28 | 4,91 | 1,64 | 0,98 | 0,00 | 4,94 | 5,69 | 5,63 | 11,32 | 11,91 | 11,94 | 0,01 | 0,00 | 11,90 |
| Rec | 1,48 | 0,81 | 0,00 | 0,83 | 1,46 | 4,91 | 2,56 | 3,20 | 4,91 | 1,48 | 0,83 | 0,00 | 4,93 | 5,69 | 5,61 | 0,01 | 0,00 | 11,94 | 0,00 | 0,00 | 0,00 |

| Ref.no. | Q6403 | | | Q6404 | | | Q6801 | | | Q7401 | | | Q7402 | | | Q7403 | | | | | |
|---------|-------|------|------|-------|------|------|-------|------|-------|-------|------|------|-------|------|------|-------|------|------|--|--|--|
| Mode | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | | | |
| Stop | 0,01 | 0,55 | 0,00 | 0,00 | 0,00 | 4,83 | 0,00 | 0,00 | 11,86 | 0,00 | 0,62 | 0,06 | 0,00 | 0,06 | 0,06 | 1,83 | 1,15 | 0,00 | | | |
| Play | 0,01 | 0,55 | 0,00 | 0,00 | 0,00 | 4,81 | 0,00 | 0,00 | 11,86 | 0,00 | 0,62 | 0,06 | 0,00 | 0,61 | 0,06 | 1,83 | 1,15 | 0,00 | | | |
| Rec | 0,01 | 0,00 | 0,55 | 0,00 | 0,00 | 4,80 | 0,00 | 0,00 | 11,86 | 0,00 | 0,62 | 0,06 | 0,00 | 0,61 | 0,06 | 1,83 | 1,15 | 0,00 | | | |

| Ref.no. Mode | Q7501 | | | Q7901 | | | Q7902 | | | | | | | | | | | | | | |
|-----------------|--------|--------|------|-------|------|-------|-------|-------|-------|--|--|--|--|--|--|--|--|--|--|--|--|
| | E | B | C | E | B | C | E | B | C | | | | | | | | | | | | |
| Stop | -26,10 | -26,00 | 4,70 | 0,00 | 0,80 | 11,60 | 0,00 | -1,01 | -0,96 | | | | | | | | | | | | |
| Play | -26,10 | -26,00 | 4,70 | 0,00 | 0,96 | 11,74 | 0,00 | -1,01 | -0,96 | | | | | | | | | | | | |
| Rec | -26,10 | -26,10 | 4,70 | 0,00 | 0,96 | 11,74 | 0,00 | -1,01 | -0,96 | | | | | | | | | | | | |

| Ref.No. | Q11301 | | | | | | | Q11501 | | | | | | | Q12001 | | | | | | |
|---------|--------|------|------|------|---|---|---|--------|------|------|-------|------|------|---|--------|------|------|--|--|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | B | E | C | | | | |
| Stop | 9.50 | 8.50 | 0.00 | 1.40 | | | | 6.15 | 6.15 | 6.23 | 12.38 | 6.15 | 6.15 | | 0.01 | 0.00 | 2.57 | | | | |
| Play | 9.50 | 8.50 | 0.00 | 1.40 | | | | 6.15 | 6.15 | 6.23 | 12.38 | 6.15 | 6.15 | | 0.01 | 0.00 | 2.57 | | | | |
| Rec. | 9.50 | 8.50 | 0.00 | 1.40 | | | | 6.15 | 6.15 | 6.23 | 12.38 | 6.15 | 6.15 | | 0.01 | 0.00 | 2.57 | | | | |

| Ref.No. | Q15001 | | | | | | | | | | Q15002 | | | | | | | | | |
|---------|--------|-------|-------|------|-------|-------|-------|-------|--|--|--------|------|------|-------|------|------|--|--|--|--|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | 1 | 2 | 3 | 4 | 5 | 6 | | | | |
| Stop | 12,43 | 12,43 | 12,43 | 6,24 | 12,43 | 12,43 | 12,43 | 12,43 | | | 5,15 | 5,15 | 7,30 | 12,41 | 5,15 | 5,15 | | | | |
| Play | 12,43 | 12,43 | 12,43 | 6,24 | 12,43 | 12,43 | 12,43 | 12,43 | | | 5,15 | 5,15 | 7,30 | 12,41 | 5,15 | 5,15 | | | | |
| Rec. | 12,43 | 12,43 | 12,43 | 6,24 | 12,43 | 12,43 | 12,43 | 12,43 | | | 5,15 | 5,15 | 7,30 | 12,41 | 5,15 | 5,15 | | | | |

| Ref.No | Q15003 | | | | | | Q33501 | | | Q33502 | | | Q33503 | | | Q33504 | | | Q33505 | | |
|--------|--------|------|-------|-------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C |
| Stop | 1,60 | 1,60 | 10,85 | 12,43 | 1,60 | 1,60 | 3,78 | 3,41 | 0,06 | 3,27 | 1,66 | 5,03 | 4,45 | 3,82 | 0,06 | 2,22 | 1,66 | 5,03 | 3,80 | 3,42 | 0,06 |
| Play | 1,60 | 1,60 | 10,85 | 12,43 | 1,60 | 1,60 | 3,78 | 3,41 | 0,06 | 3,27 | 1,66 | 5,03 | 4,45 | 3,82 | 0,06 | 2,22 | 1,66 | 5,03 | 3,80 | 3,42 | 0,06 |
| Rec. | 1,60 | 1,60 | 10,85 | 12,43 | 1,60 | 1,60 | 3,78 | 3,41 | 0,06 | 3,27 | 1,66 | 5,03 | 4,45 | 3,82 | 0,06 | 2,22 | 1,66 | 5,03 | 3,80 | 3,42 | 0,06 |

| Ref.No. | Q37001 | | | Q37002 | | | | | | | | | | | | | | | | | |
|---------|--------|------|-------|--------|------|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Mode | E | B | C | E | B | C | | | | | | | | | | | | | | | |
| Stop | 6,12 | 6,74 | 12,43 | 5,11 | 5,72 | 12,43 | | | | | | | | | | | | | | | |
| Play | 6,12 | 6,74 | 12,43 | 5,11 | 5,72 | 12,43 | | | | | | | | | | | | | | | |
| Rec. | 6,12 | 6,74 | 12,43 | 5,11 | 5,72 | 12,43 | | | | | | | | | | | | | | | |

| Ref.no. | QR3001 | | | QR3002 | | | QR3003 | | | QR3005 | | | QR3901 | | | QR3902 | | | QR4003 | | |
|---------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|
| Mode | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C |
| Stop | 0,00 | 4,87 | 0,00 | 0,00 | 0,00 | 2,11 | 0,00 | 0,00 | 2,19 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,46 | 0,00 | 0,00 | 4,95 | 0,00 | 0,00 | 0,00 |
| Play | 0,00 | 4,87 | 0,00 | 0,00 | 0,00 | 2,11 | 0,00 | 0,00 | 2,19 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,45 | 0,00 | 0,00 | 4,95 | 0,00 | 0,00 | 0,00 |
| Rec | 0,00 | 4,86 | 0,00 | 0,00 | 0,00 | 2,11 | 0,00 | 0,00 | 2,19 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 4,45 | 0,01 | 0,00 | 4,95 | 0,00 | 0,00 | 0,00 |

| Ref.no. | QR4004 | | | QR4005 | | | QR4501 | | | QR4901 | | | QR4902 | | | QR4903 | | | QR4904 | | |
|---------|--------|------|-------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|-------|
| Mode | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C |
| Stop | 5,01 | 0,00 | 4,92 | 0,00 | 0,00 | 5,59 | 0,00 | 4,67 | 0,01 | 0,00 | 0,00 | 4,95 | 4,96 | 4,95 | 0,00 | 0,00 | 0,00 | 0,07 | 0,00 | 0,00 | -0,90 |
| Play | 5,00 | 0,00 | 4,91 | 0,00 | 0,00 | 5,58 | 0,00 | 4,67 | 0,01 | 0,00 | 0,00 | 4,95 | 4,96 | 4,95 | 0,00 | 0,00 | 0,00 | 0,06 | 0,00 | 0,00 | -0,08 |
| Rec | 4,98 | 4,84 | -7,39 | 0,00 | 4,87 | 0,02 | 0,00 | 4,66 | 0,01 | 0,00 | 0,00 | 4,95 | 4,96 | 4,95 | 0,00 | 0,00 | 0,00 | 0,06 | 0,00 | 0,00 | -0,08 |

| Ref.no. | QR4905 | | | QR4906 | | | QR4911 | | | QR4912 | | | QR4913 | | | QR4914 | | | QR6402 | | |
|---------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|
| Mode | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C |
| Stop | 0,00 | 0,00 | 0,03 | 0,00 | 0,00 | 0,08 | 4,79 | 0,01 | 4,73 | 0,01 | 4,73 | 0,01 | 0,00 | 4,73 | 0,01 | 0,00 | 4,46 | 0,04 | 0,01 | 0,00 | 4,50 |
| Play | 0,00 | 0,00 | 0,03 | 0,00 | 0,00 | 0,08 | 0,00 | 0,01 | 0,00 | 0,01 | 0,00 | 0,01 | 0,01 | 0,00 | 0,02 | 0,00 | 4,46 | 0,04 | 0,01 | 0,00 | 4,50 |
| Rec | 0,00 | 0,00 | 0,02 | 0,00 | 0,00 | 0,08 | 0,00 | 0,01 | 0,00 | 0,01 | 0,00 | 0,09 | 0,01 | 0,00 | 0,08 | 0,00 | 4,45 | 0,04 | 0,01 | 0,00 | 4,50 |

| Ref.no. | QR6403 | | | QR6801 | | | QR7401 | | | QR7402 | | | QR7505 | | | QR15001 | | | QR15002 | | |
|---------|--------|------|-------|--------|-------|------|--------|------|-------|--------|------|-------|--------|------|------|---------|------|------|---------|------|------|
| Mode | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C |
| Stop | 0,00 | 4,92 | 0,00 | 11,97 | 11,86 | 4,78 | 36,16 | 0,06 | 36,11 | 36,20 | 0,06 | 36,15 | 0,00 | 0,00 | 4,20 | 0,02 | 4,91 | 0,06 | 0,02 | 0,06 | 4,51 |
| Play | 0,00 | 0,00 | 11,92 | 11,97 | 11,86 | 4,78 | 36,16 | 0,06 | 36,11 | 36,21 | 0,06 | 36,16 | 0,00 | 0,00 | 4,20 | 0,02 | 4,91 | 0,06 | 0,02 | 0,06 | 4,51 |
| Rec | 0,00 | 4,91 | 0,00 | 11,97 | 11,86 | 4,77 | 36,17 | 0,06 | 36,12 | 36,20 | 0,06 | 36,16 | 0,00 | 0,00 | 4,20 | 0,02 | 4,91 | 0,06 | 0,02 | 0,06 | 4,51 |

| Ref.no. | QR15003 | | | QR15004 | | | QR15005 | | | QR15007 | | | QR33701 | | | QR35007 | | | QR35008 | | |
|---------|---------|------|------|---------|------|------|---------|------|------|---------|------|------|---------|------|------|---------|------|------|---------|------|------|
| Mode | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C |
| Stop | 0,02 | 4,87 | 0,02 | 0,01 | 4,88 | 0,06 | 0,02 | 4,91 | 0,06 | 0,02 | 0,06 | 4,54 | 0,06 | 0,81 | 2,80 | 0,05 | 0,07 | 2,22 | 0,05 | 0,07 | 2,21 |
| Play | 0,02 | 4,87 | 0,02 | 0,01 | 4,88 | 0,06 | 0,02 | 4,91 | 0,06 | 0,02 | 0,06 | 4,54 | 0,06 | 0,81 | 2,80 | 0,05 | 0,07 | 2,22 | 0,05 | 0,07 | 2,21 |
| Rec | 0,02 | 4,87 | 0,02 | 0,01 | 4,88 | 0,06 | 0,02 | 4,91 | 0,06 | 0,02 | 0,06 | 4,54 | 0,06 | 0,81 | 2,80 | 0,05 | 0,07 | 2,22 | 0,05 | 0,07 | 2,21 |

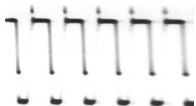

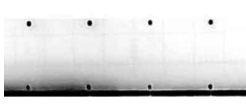
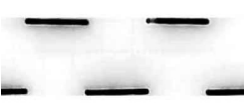
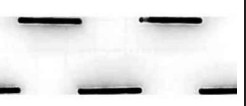
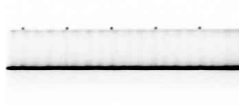




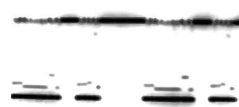


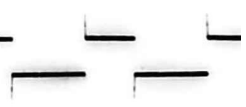
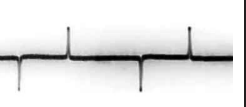
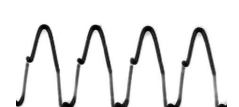




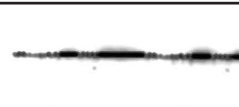
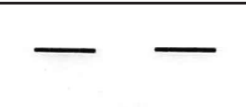
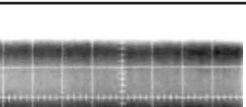
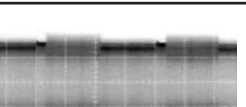
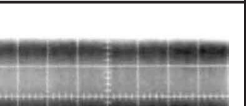





| Ref.no. | QR37501 | | | QR37502 | | | QR37503 | | | QR45001 | | | QR45002 | | | QR45003 | | | QR45004 | | |
|---------|---------|------|------|---------|------|------|---------|------|------|---------|------|------|---------|------|------|---------|------|------|---------|------|------|
| Mode | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C |
| Stop | 0,06 | 4,93 | 0,07 | 0,06 | 2,28 | 0,08 | 0,06 | 0,07 | 3,34 | 6,02 | 0,06 | 5,95 | 0,05 | 6,00 | 0,06 | 0,05 | 3,33 | 0,06 | 0,05 | 6,00 | 0,06 |
| Play | 0,06 | 4,93 | 0,07 | 0,06 | 2,28 | 0,08 | 0,06 | 0,07 | 3,34 | 6,02 | 6,01 | 0,45 | 0,05 | 0,46 | 0,06 | 0,05 | 0,08 | 0,06 | 0,05 | 0,42 | 0,06 |
| Rec | 0,06 | 4,93 | 0,07 | 0,06 | 2,28 | 0,08 | 0,06 | 0,07 | 3,34 | 6,02 | 0,06 | 5,95 | 0,05 | 6,00 | 0,06 | 0,05 | 3,33 | 0,06 | 0,05 | 6,00 | 0,06 |

| Ref.no. | QR45005 | | | QR45006 | | | QR45007 | | | QR45008 | | | QR45009 | | | | | | | | |
|---------|---------|------|------|---------|------|------|---------|------|------|---------|------|------|---------|------|------|--|--|--|--|--|--|
| Mode | E | B | C | E | B | C | E | B | C | E | B | C | E | B | C | | | | | | |
| Stop | 0,05 | 6,00 | 0,01 | 0,05 | 4,91 | 0,06 | 0,05 | 0,06 | 0,06 | 0,05 | 3,33 | 0,06 | 0,05 | 0,06 | 3,32 | | | | | | |
| Play | 0,05 | 0,42 | 0,07 | 0,05 | 4,91 | 0,06 | 0,05 | 0,06 | 6,01 | 0,05 | 0,08 | 6,01 | 0,05 | 2,36 | 0,08 | | | | | | |
| Rec | 0,05 | 0,42 | 0,06 | 0,05 | 4,91 | 0,06 | 0,05 | 0,06 | 0,06 | 0,05 | 3,33 | 0,06 | 0,05 | 0,07 | 3,33 | | | | | | |

20.1. WAVEFORM CHART

NOTE:

The waveforms are measured with PAL colour bar signal.

| | | | | |
|---|--|---|--|--|
|  T11101-5 STOP 50Vp-p (5μsec.div.) |  T11101-6 STOP 0.2Vp-p (5μsec.div.) |  IC6001-13 PAUSE 5.0Vp-p (10msec.div.) |  IC6001-18 REC 5.0Vp-p (10msec.div.) |  IC6001-19 REC 5.0Vp-p (10msec.div.) |
|  IC6001-48 REC 0.5Vp-p (10msec.div.) |  IC6001-52 REC 2.1Vp-p (20μsec.div.) |  IC6001-68,69 REC 5.0Vp-p (10msec.div.) |  IC6001-70 REC 5.0Vp-p (10msec.div.) |  IC6001-71 REC 5.0Vp-p (10msec.div.) |
|  IC6001-72 REC 5.0Vp-p (10msec.div.) |  IC6001-79,80 FF/REW 5.0Vp-p (1msec.div.) |  IC6001-90 REC 5.0Vp-p (10msec.div.) |  IC6001-94,95 REC 6.0Vp-p (10msec.div.) |  IC6001-97 PLAY 4.5Vp-p (10msec.div.) |
|  IC2501-2,4 REC 12Vp-p (5msec.div.) |  IC3001-6 REC/PLAY 0.9Vp-p (0.5msec.div.) |  IC3001-15,17,19 REC 1.1Vp-p (20μsec.div.) |  IC3001-45,46 PLAY 0.5Vp-p (20μsec.div.) |  IC3001-73 REC/PLAY 5.0Vp-p (5msec.div.) |
|  IC3001-74 REC/PLAY 5.0Vp-p (5msec.div.) |  IC3001-80 REC/PLAY 0.6Vp-p (10msec.div.) |  IC3001-85 PLAY 1.5Vp-p (20μsec.div.) |  IC3001-86 REC 1.5Vp-p (5msec.div.) |  IC3001-87 PLAY 1.5Vp-p (20μsec.div.) |
|  IC3001-96 PLAY 5.0Vp-p (5msec.div.) |  IC3001-98 REC 2.4Vp-p (1msec.div.) |  IC4501-9,14 REC 100mVp-p (1msec.div.) |  IC4501-21(TW4501) REC 1.5Vp-p (20μsec.div.) |  IC4501-53,57 REC/PLAY 1.9Vp-p (0.2msec.div.) |

21 ABBREVIATIONS

21.1. DVD

| INITIAL/LOGO | ABBREVIATIONS |
|--------------|--|
| A | A0~UP ADDRESS ACLK AUDIO CLOCK AD0~UP ADDRESS BUS ADATA AUDIO PES PACKET DATA ALE ADDRESS LATCH ENABLE AMUTE AUDIO MUTE AREQ AUDIO PES PACKET REQUEST ARF AUDIO RF ASI SERVO AMP INVERTED INPUT ASO SERVO AMPOUTPUT ASYNC AUDIO WORD DISTINCTION SYNC |
| B | BCK BIT CLOCK (PCM) BCKIN BIT CLOCK INPUT BDO BLACK DROP OUT BLKCK SUB CODE BLOCK CLOCK BOTTOM CAP. FOR BOTTOM HOLD BYP BYPATH BYTCK BYTE CLOCK |
| C | CAV CONSTANT ANGULAR VELOCITY CBDO CAP. BLACK DROP OUT CD COMPACT DISC CDSCK CD SERIAL DATA CLOCK CDSRDATA CD SERIAL DATA CDRF CD RF (EFM) SIGNAL CDV COMPACT DISC-VIDEO CHNDATA CHANNEL DATA CKSL SYSTEM CLOCKSELECT CLV CONSTANT LINEAR VELOCITY COFTR CAP. OFF TRACK CPA CPU ADDRESS CPCS CPU CHIP SELECT CPDT CPU DATA CPUADR CPU ADDRESS LATCH CPUADT CPU ADDRESS DATA BUS CPUIRQ CPU INTERRUPT REQUEST CPRD CPU READ ENABLE CPWR CPU WRITE ENABLE CS CHIPSELECT CSYNCIN COMPOSITE SYNC IN CSYNCOUT COMPOSITE SYNC OUT |
| D | DACCK D/A CONVERTER CLOCK DEEMP DEEMPHASIS BIT ON/OFF DEMPH DEEMPHASIS SWITCHING DIG0~UP FL DIGIT OUTPUT DIN DATA INPUT DMSRCK DM SERIAL DATA READ CLOCK DMUTE DIGITAL MUTE CONTROL DO DROP OUT DOUT0~UP DATAOUTPUT DRF DATA SLICE RF (BIAS) DRPOUT DROP OUT SIGNAL DREQ DATA REQUEST DRESP DATA RESPONSE DSC DIGITAL SERVO CONTROLLER DSLF DATA SLICE LOOP FILTER DVD DIGITAL VIDEO DISC |

| INITIAL/LOGO | ABBREVIATIONS |
|--------------|---|
| E | EC ERROR TORQUE CONTROL ECR ERROR TORQUE CONTROL REFERENCE ENCSEL ENCODER SELECT ETMCLK EXTERNAL M CLOCK (81MHz/40.5MHz) ETSCLK EXTERNAL S CLOCK (54MHz) |
| F | FBAL FOCUS BALANCE FCLK FRAME CLOCK FE FOCUS ERROR FFI FOCUS ERROR AMP INVERTED INPUT FEO FOCUS ERROR AMP OUTPUT FG FREQUENCY GENERATOR FSC FREQUENCY SUB CARRIER FSCK FS (384 OVER SAMPLING) CLOCK |
| G | GND COMMON GROUNDING (EARTH) |
| H | HA0~UP HOST ADDRESS HD0~UP HOST DATA HINT HOST INTERRUPT HRXW HOST READ/WRITE |
| I | IECOUT IEC958 FORMAT DATA OUTPUT IPFRAG INTERPOLATION FLAG IREF I (CURRENT) REFERENCE ISEL INTERFACE MODE SELECT |
| L | LDON LASER DIODE CONTROL LPC LASER POWER CONTROL LRCK L CH/R CH DISTINCTION CLOCK |
| M | MA0~UP MEMORY ADDRESS MCK MEMORY CLOCK MCKI MEMORY CLOCK INPUT MCLK MEMORY SERIAL COMMAND CLOCK MDATA MEMORY SERIAL COMMAND DATA MDQ0~UP MEMORY DATA INPUT/OUTPUT MDQM MEMORY DATA I/O MASK MLD MEMORYSERIAL COMMAND LOAD MPEG MOVING PICTURE EXPERTS GROUP |
| O | ODC OPTICAL DISC CONTROLLER OFTR OFF TRACKING OSCI OSCILLATOR INPUT OSCO OSCILLATOR OUTPUT OSD ON SCREEN DISPLAY |
| P | P1~UP PORT PCD CD TRACKING PHASE DIFFERENCE PCK PLL CLOCK PDVD DVD TRACKING PHASE DIFFERENCE PEAK CAP. FOR PEAK HOLD PLLCLK CHANNEL PLL CLOCK PLLCK PLL LOCK PWMCTL PWM OUTPUT CONTROL PWMDA PULSE WAVE MOTOR DRIVEA PWMOA, B PULSE WAVE MOTOR OUT A, B |

| INITIAL/LOGO | | ABBREVIATIONS |
|--------------|----------|-----------------------------|
| R | RE | READ ENABLE |
| | RFENV | RF ENVELOPE |
| | RFO | RF PHASE DIFFERENCE OUTPUT |
| | RS | (CD-ROM) REGISTER SELECT |
| | RSEL | RF POLARITY SELECT |
| | RST | RESET |
| S | RSV | RESERVE |
| | SBI0, 1 | SERIAL DATA INPUT |
| | SBO0 | SERIAL DATA OUTPUT |
| | SBT0, 1 | SERIAL CLOCK |
| | SCK | SERIAL DATA CLOCK |
| | SCKR | AUDIO SERIAL CLOCK RECEIVER |
| | SCL | SERIAL CLOCK |
| | SCLK | SERIAL CLOCK |
| | SDA | SERIAL DATA |
| | SEG0-UP | FL SEGMENT OUTPUT |
| | SELCLK | SELECTCLOCK |
| | SEN | SERIAL PORT ENABLE |
| | SIN1, 2 | SERIAL DATA IN |
| | SOUT1, 2 | SERIAL DATA OUT |
| | SPDI | SERIAL PORT DATA INPUT |
| | SPDO | SERIAL PORT DATA OUTPUT |
| | SPEN | SERIAL PORT R/W ENABLE |
| | SPRCLK | SERIAL PORT READ CLOCK |
| | SPWCLK | SERIAL PORT WRITE CLOCK |
| | SQCK | SUB CODE Q CLOCK |
| | SQCX | SUBCODE Q DATA READ CLOCK |
| | SRDATA | SERIAL DATA |
| | SRMADR | SRAM ADDRESS BUS |
| | SRMDT0-7 | SRAM DATA BUS 0-7 |
| | SS | START/STOP |
| | STAT | STATUS |
| | STCLK | STREAM DATA CLOCK |
| | STD0-UP | STREAM DATA |
| | STENABLE | STREAM DATA INPUT ENABLE |
| | STSEL | STREAM DATA POLARITY SELECT |
| | STVALID | STREAM DATAVALIDITY |
| | SUBC | SUB CODE SERIAL |
| | SBCK | SUB CODE CLOCK |
| | SUBQ | SUB CODE Q DATA |
| | SYSCLK | SYSTEM CLOCK |
| T | TE | TRACKING ERROR |
| | TIBAL | BALANCE CONTROL |
| | TID | BALANCE OUTPUT 1 |
| | TIN | BALANCE INPUT |
| | TIP | BALANCE INPUT |
| | TIS | BALANCE OUTPUT 2 |
| | TPSN | OP AMP INPUT |
| | TPSO | OP AMP OUTPUT |
| | TPSP | OP AMP INVERTED INPUT |
| | TRCRS | TRACK CROSS SIGNAL |
| | TRON | TRACKING ON |
| | TRSON | TRAVERSE SERVO ON |

| INITIAL/LOGO | | ABBREVIATIONS |
|--------------|---------|-------------------------------------|
| V | VBLANK | V BLANKING |
| | VCC | COLLECTOR POWER SUPPLY VOLTAGE |
| | VCDCONT | VIDEO CD CONTROL (TRACKING BALANCE) |
| | VDD | DRAIN POWER SUPPLY VOLTAGE |
| | VFB | VIDEO FEED BACK |
| | VREF | VOLTAGE REFERENCE |
| W | VSS | SOURCE POWER SUPPLY VOLTAGE |
| | WAIT | BUS CYCLE WAIT |
| | WDCK | WORD CLOCK |
| | WEH | WRITE ENABLE HIGH |
| X | WSR | WORD SELECT RECEIVER |
| | X | X' TAL |
| | XALE | X ADDRESS LATCH ENABLE |
| | XAREQ | X AUDIO DATA REQUEST |
| | XCDROM | X CD ROM CHIP SELECT |
| | XCS | X CHIP SELECT |
| | XCSYNC | X COMPOSITE SYNC |
| | XDS | X DATA STROBE |
| | XHSYNCO | X HORIZONTAL SYNC OUTPUT |
| | XHINT | XH INTERRUPT REQUEST |
| | XI | X' TAL OSCILLATOR INPUT |
| | XINT | X INTERRUPT |
| | XMW | X MEMORY WRITE ENABLE |
| | XO | X' TAL OSCILLATOR OUTPUT |
| | XRE | X READ ENABLE |
| | XSRMCE | X SRAM CHIP ENABLE |
| | XSRMOE | X SRAM OUTPUT ENABLE |
| | XSRMWE | X SRAM WRITE ENABLE |
| | XVCS | X V-DEC CHIPSELECT |
| | XVDS | X V-DEC CONTROL BUS STROBE |
| | XVSYNCO | X VERTICAL SYNC OUTPUT |

21.2. VHS

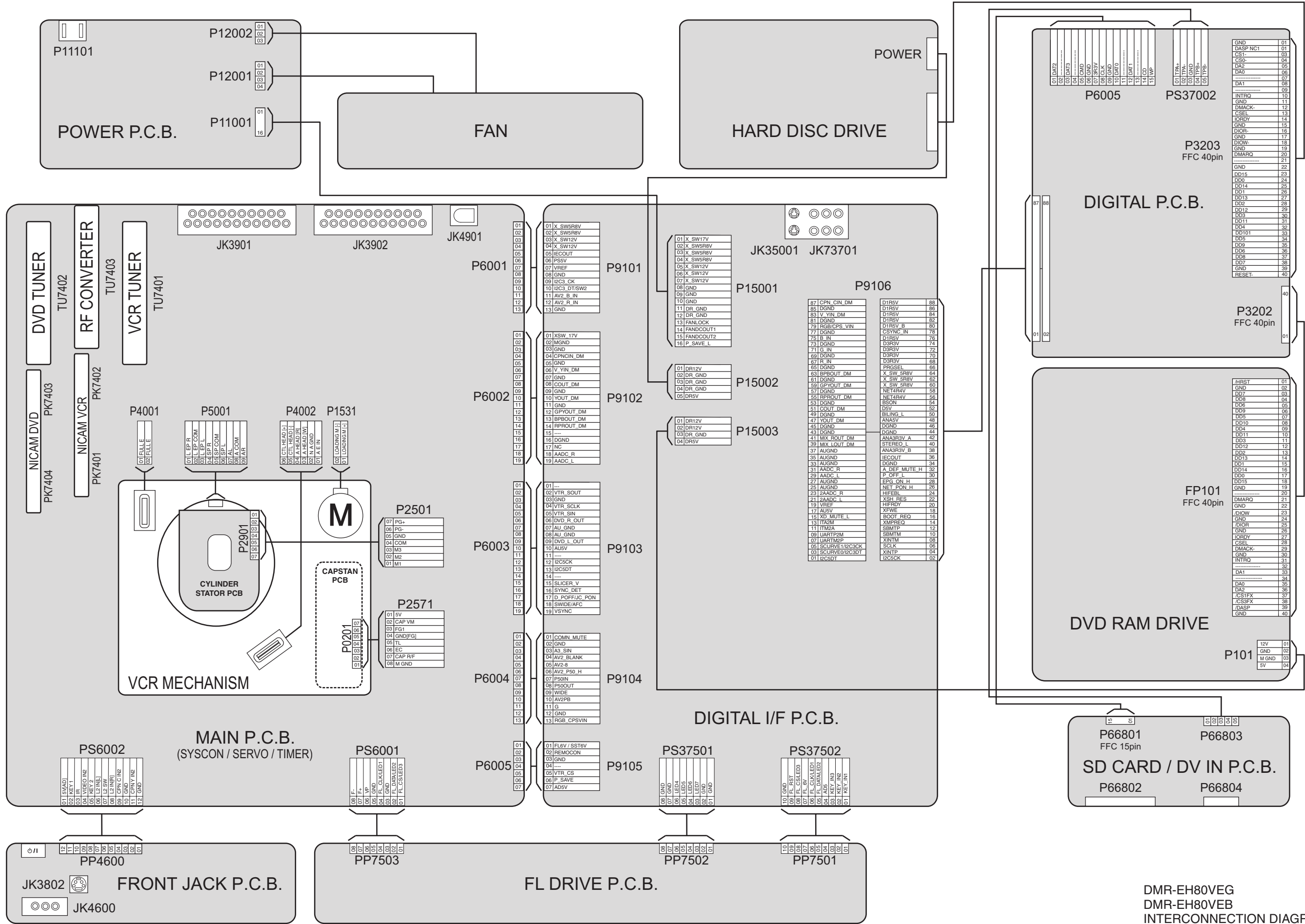
| | | | |
|------------------|--|--------------|-----------------------------|
| 443NT [L] | 4.43 NTSC ① | BIL | BILINGUAL |
| A. COMP | AUDIO COMPONENT SIGNAL | BIL [L] | BILINGUAL ① |
| A. COMPO | AUDIO COMPONENT SIGNAL | BIL. [H] | BILINGUAL ② |
| A. D.P [L] | AUDIO DUBBING PAUSE ① | BIL/M1 [L] | BILINGUAL ① |
| A. D/L [L] | AUDIO DUBBING PAUSE ① | BS CLOCK | BS CLOCK |
| A. DEF [S] | AUDIO DEFEAT | BS DATA | BS DATA |
| A. DEF [S] [L] | AUDIO DEFEAT | BS L CHAN IN | BS L CHANNEL INPUT |
| A. DUB P [L] | AUDIO DUBBING PAUSE ① | BS MIX [H] | BS MIX ② |
| A. DUB [H] | AUDIO DUBBING ② | BS MON [H] | BS MONITOR ② |
| A. ERASE | AUDIO ERASE | BS MONI [H] | BS MONITOR ② |
| A. H. SW | AUDIO HEAD SWITCHING PULSE | BS RCH IN | BS R CHANNEL INPUT |
| A. HEAD [R] | AUDIO HEAD (REC) | BS VIDEO | BS VIDEO SIGNAL |
| A. HEAD [W] | AUDIO HEAD (PLAY) | BS VIDEO/BS1 | BS VIDEO SIGNAL |
| A. IN [L] | AUDIO INPUT (L) | BS [H] | BS ② |
| A. IN [R] | AUDIO INPUT (R) | BS. LEVEL | BS LEVEL |
| A. MUT [H] | AUDIO MUTE ② | BS. M [H] | BS MONITOR ② |
| A. MUTE [H] | AUDIO MUTE ② | BS/VTR [H] | BS/VTR ② |
| A. OUT [L] | AUDIO OUTPUT (L) | BUS CLK | BUS CLOCK |
| A. OUT [R] | AUDIO OUTPUT (R) | BUS LSN | BUS LISTEN |
| A. RF OUT | AUDIO RF SIGNAL OUTPUT | BUS TLK | BUS TALK |
| A/V/S. DATA | AV SW/SERIAL DATA | BUZZER | BUZZER |
| AC ONLINE | AC ONLINE | CAP EC | CAPSTAN TORQUE CONTROL |
| AC. O/EE. H | AC ONLINE/EE ② | CAP M GND | CAPSTAN MOTOR GND |
| AFC S C | AFC S CURVE | CAP. ET | CAPSTAN TORQUE CONTROL |
| AFC [S] | AFC S CURVE | CAP. FG1 | CAPSTAN FG1 PULSE |
| AFC. DEF | AFC DEFEAT | CAP. FG2 | CAPSTAN FG2 PULSE |
| ARFC OUT | AUDIO RF SIGNAL OUTPUT | CAS. SW | CASSETTE SW |
| ART. V | ARTIFICIAL VERTICAL SYNC SIGNAL | CCN | PLAYBACK CONTROL SIGNAL (-) |
| ART. V. MM | ARTIFICIAL VERTICAL SYNC SIGNAL MONO MULTI | CCP | PLAYBACK CONTROL SIGNAL (+) |
| ART. V/H/N | ARTIFICIAL VERTICAL SYNC SIGNAL ②/NORMAL | CHM | CONTROL SIGNAL (+) |
| AT. V/H/N | ARTIFICIAL VERTICAL SYNC SIGNAL | CHP | CONTROL SIGNAL (-) |
| ATSW/TEST/NOR/SE | TEST/NORMAL/SERVICE | CINEM [L] | CINEMA ① |
| AUDIO IN [L] | AUDIO INPUT (L) | CINEMA [L] | CINEMA ① |
| AUDIO IN [R] | AUDIO INPUT (R) | CINEMA/MIX | CINEMA/MIX |
| AUDIO OUT [L] | AUDIO OUTPUT (L) | CKL | RATCH LOCK |
| AUDIO OUT [R] | AUDIO OUTPUT (R) | CKS | SHIFT LOCK |
| AUDIO SELECT [H] | AUDIO SELECT ② | CL | CLOCK |
| AUDIO. L | AUDIO (L) | CLK | CLOCK |
| AUDIO. R | AUDIO (R) | CLK (C.G) | CLOCK |
| AV CNT | AV CONTROL | CLOCK. IN | CLOCK INPUT |
| AV CTL | AV CONTROL | CLP | CLAMP |
| AV CTL/S. CLK | AV CONTROL/SERIAL CLOCK | COL/B/W/NOR | COLOUR/BLACK & WHITE/NORMAL |
| AV. C.M. | AV CONTROL MODE | COLOR [H] | COLOUR ② |
| AVCNT/METER. R | AV CONTROL/LEVEL METER (R) | CONV | CONVERTOR |
| AVSW/METER. L | AV SW/LEVEL METER (L) | CS | CHIP SELECT |
| B MODE. H | B MODE ② | CTL GND | CONTROL GND |
| B.G.P | BURST GATE PULSE | CTL HEAD [+] | CONTROL HEAD (+) |
| BACKUP 5V | BACK UP 5V | CTL HEAD [-] | CONTROL HEAD (-) |
| BAND. U.E. | BAND U | CTL [+] | CONTROL HEAD (+) |
| BANDVL. D | BAND VL | CTL [-] | CONTROL HEAD (-) |
| BI/MI [L] | BILINGUAL/MIX ① | CUE BIAS | CUE BIAS |
| | | CURRENT LIM | CURRENT LIMMITER |
| | | CYL ET | CYLINDER TORQUE CONTROL |

| | | | |
|-------------------|--|------------------|----------------------------------|
| CYL GND | CYLINDER GND | FULL. E. 12V | FULL ERASE 12V |
| D.F.M. REC [H] | DELAIED FM RECORDING \textcircled{H} | GND [A] | GND (ANALOG) |
| D. FM REC [L] | DELAIED FM RECORDING \textcircled{L} | GND [TU] | GND (TUNER) |
| D. GND | DIGITAL GND | GND/N. SW. 12V | GND/NON SW 12V |
| D. REC [H] | DELAYED RECORDING \textcircled{H} | H. SYNC | HORIZONTAL SYNC |
| D4/S. LED | D4/STILL LED | H. AMP. SW | HEAD AMP SW PULSE |
| D4/STILLED | D4/STILL LED | H. P <R> | HEAD PHONE (R) |
| DAC [CLK] | TUNER DAC (CLOCK) | H. P <L> | HEAD PHONE (L) |
| DAC/FSCS | TUNER DAC/FS CHIP SELECT | H. P GND | HEAD PHONE GND |
| DAREC [H] | DELAYED AUDIO RECORDING \textcircled{H} | H. P OUT [L] | HEAD PHONE OUTPUT (L) |
| DATA | DATA | H. P OUT [R] | HEAD PHONE OUTPUT (R) |
| DECODER [L] | DECODER (L) | H. SW | HEAD SW PULSE |
| DECODER [R] | DECODER (R) | HEAD PHONE [L] | HEAD PHONE (L) |
| DEW | DEW | HEAD PHONE [R] | HEAD PHONE (R) |
| DEW SNS | DEW SENSOR | HEAD SW | HEAD SW |
| DFMRE [H] | DELAYED FM AUDIO RECORDING \textcircled{H} | HEATER [+] | HEATER (+) |
| E. REC 5V | EXCEPT RECORDING 5V | HEATER [-] | HEATER (-) |
| EC | ERROR TORQUE CONTROL | HSS | HORIZONTAL SYNC SIGNAL |
| ECR | ERROR TORQUE CONTROL | HTR [+] | HEATER (+) |
| | REFERENCE VOLTAGE | HTR [-] | HEATER (-) |
| EDT TRIG [L] | EDIT TRIGGER \textcircled{L} | I RFE | REFERENCE CURRENT |
| EDIT [H] | EDIT \textcircled{H} | ICL | CONTROL AGC CIRCUIT |
| EE [H] | EE \textcircled{H} | IF | INTERMEDIATE FREQUENCY |
| EE [H]/INS [M] | EE \textcircled{H} /INSERT \textcircled{M} | IN SELA1 | INPUT SELECT A1 POSITION |
| EE. VV. TR | EE/VV/TRICK PLAY | IN SELA2 | INPUT SELECT A2 POSITION |
| EJECT. PO | EJECT POSITION | IN SELA3 | INPUT SELECT A3 POSITION |
| EJECT/VDET | EJECT/REVERSE SLOW LOCK | INS L/R [L] | INSERT Lch/Rch \textcircled{L} |
| ENV. SEL | ENVELOPE SELECT | INS. [H] | INSERT \textcircled{H} |
| ENVE. OUT | ENVELOPE OUTPUT | INSEL A1 | INPUT SELECT A1 POSITION |
| ENVE. SEL | ENVELOPE SELECT | INSEL A2 | INPUT SELECT A2 POSITION |
| ENV SELECT | ENVELOPE SELECT | INSERT | INSERT |
| EP [H] | LP \textcircled{H} | INSERT [H] | INSERT \textcircled{H} |
| EP/LP [H] | LP \textcircled{H} | IO CS | INPUT/OUTPUT CHIP SELECT |
| EP/LP/SP | LP/SP | JOG1 | JOG1 |
| EP/SS [H] | LP/SLOW/STILL/STOP \textcircled{H} | JOG S3 LED/FOWRD | JOG LED/FORWARD LED |
| EPROMCS | EPROM CHIP SELECT | JOG/F. LED | JOG LED/FORWARD LED |
| EX. REC 5V | EXCEPT RECORDING 5V | JSB [H] | JSB \textcircled{H} |
| FF/REW [L] | FIRST FORWARD/REWIND \textcircled{L} | JST. CLCK | JUST CLOCK |
| FG1 IN | FG1 PULSE INPUT | JST. CLK | JUST CLOCK |
| FG2 IN | FG2 PULSE INPUT | JST. CLOCK | JUST CLOCK |
| FILTER ADJUSTMENT | FILTER ADJUSTMENT | L. OUT | Lch OUTPUT |
| FLY ERASE [H] | FLYING ERASE HEAD ON \textcircled{H} | L. CH [H] | Lch \textcircled{H} |
| FLY ON [H] | FLYING ERASE HEAD ON \textcircled{H} | L. CH [L] | Lch \textcircled{L} |
| FLY. E [H] | FLYING ERASE HEAD ON \textcircled{H} | LED (MAIN) | LED (MAIN) |
| FM MUT [H] | FM AUDIO MUTE \textcircled{H} | LED (STEREO) | LED (STEREO) |
| FM MUTE [H] | FM AUDIO MUTE \textcircled{H} | LED (SUB) | LED (SUB) |
| FM OUT [L] | FM OUTPUT (L) | LED CKL | LED SERIAL CLOCK |
| FM OUT [R] | FM OUTPUT (R) | LED CKS | LED SERIAL CLOCK |
| FM PACK OUT [L] | FM PACK OUTPUT (L) | LED DATA | LED SERIAL DATA |
| FM PACK OUT [R] | FM PACK OUTPUT (R) | LINE IN 1 [L] | LINE INPUT 1 (L) |
| FM/BS SEL [L] | FM/BS SELECT (L) | LINE IN 1 [R] | LINE INPUT 1 (R) |
| FM/BS SEL [R] | FM/BS SELECT (R) | LINE IN 2 [L] | LINE INPUT 2 (L) |
| FS. CLK | FS CLOCK | LINE IN 2 [R] | LINE INPUT 2 (R) |
| FUL. E [H] | FULL ERASE HEAD ON \textcircled{H} | LINE IN V | LINE INPUT VIDEO |
| FULL. E [H] | FULL ERASE HEAD ON \textcircled{H} | LINE IN [L] | LINE INPUT (L) |

| | | | |
|--------------------|--|------------------|---|
| LINE IN [R] | LINE INPUT (R) | P-OFF [H] | POWER OFF $\textcircled{\text{H}}$ |
| LINE OUT [L] | LINE OUTPUT (L) | P-OFF [L] | POWER OFF $\textcircled{\text{L}}$ |
| LINE OUT [R] | LINE OUTPUT (R) | P. FAIL | POWER FAILURE DETECT |
| LP [H] | LP $\textcircled{\text{H}}$ | P. OFF [H] | POWER OFF $\textcircled{\text{H}}$ |
| LPTRI [L] | LP TRICK PLAY $\textcircled{\text{L}}$ | P. OFF [L] | POWER OFF $\textcircled{\text{L}}$ |
| Lch/A. DUB | Lch/AUDIO DUBBING | PAL [H] | PAL $\textcircled{\text{H}}$ |
| M GND | MOTOR GND | PAL [L]/NTSC [H] | PAL $\textcircled{\text{L}}$ /NTSC $\textcircled{\text{H}}$ |
| M REG | MOTOR REGULATOR | PB ADJ OUT | PLAYBACK ADJUST OUTPUT |
| MAIN OUT | MAIN OUTPUT | PB OUT | PLAYBACK OUTPUT |
| MAIN [L] | MAIN $\textcircled{\text{L}}$ | PB. H | PLAYBACK $\textcircled{\text{H}}$ |
| MAIN/MONO | MAIN/MONAUURAL | PFG | PG/FG |
| MAX IN | MAXIMAM INPUT | PHOTSN +B | PHOTO SENSOR +B |
| MES [H] | MESECAM $\textcircled{\text{H}}$ | PICT. CNT | PICTURE CONTROL |
| MESE [H] | MESECAM $\textcircled{\text{H}}$ | PLAY LED/RVS LED | PLAY LED/REVERSE LED |
| MESE [L] | MESECAM $\textcircled{\text{L}}$ | PLAY. PO | PLAY POSITION |
| METER 5V | LEVEL METER 5V | PLAY/R. LED | PLAY LED/REVERSE LED |
| METER [L] | LEVEL METER (L) | PLY/DEW | PLAY/DEW $\textcircled{\text{H}}$ |
| METER [R] | LEVEL METER (R) | POWER OFF [L] | POWER OFF $\textcircled{\text{L}}$ |
| METER. L/AVS | LEVEL METER (L) | PREROLL [H] | PREROLL $\textcircled{\text{H}}$ |
| METER. R/AVC | LEVEL METER (R) | PWRFAIL | POWER FAILURE DETECT |
| MI/BI [L] | MIX $\textcircled{\text{H}}$ /BILIGUAL | R. CH [H] | Rch $\textcircled{\text{H}}$ |
| MIC GND | MIC GND | R. CH [L] | Rch $\textcircled{\text{L}}$ |
| MIC IN | MIC INPUT | R. ST | RESET |
| MIC IN [L] | MIC INPUT (L) | R/S/F | REVERSE $\textcircled{\text{H}}$ /STOP $\textcircled{\text{M}}$ /FORWARD $\textcircled{\text{L}}$ |
| MIC IN [R] | MIC INPUT (R) | RCH [H] | Rch $\textcircled{\text{H}}$ |
| MIC [H] | MIC $\textcircled{\text{H}}$ | REC 12V | RECORDING 12V |
| MIX [H] | MIX $\textcircled{\text{H}}$ | REC CHROMA | RECORDING CHROMINANCE SIGNAL |
| MIX [H]/CINEMA [L] | MIX $\textcircled{\text{H}}$ /CINEMA SOUND $\textcircled{\text{L}}$ | REC H | RECORDING $\textcircled{\text{H}}$ |
| MIX/CINE | MIX $\textcircled{\text{H}}$ /CINEMA SOUND $\textcircled{\text{L}}$ | REC IN | RECORDING INPUT |
| MIX/CINEMA [L] | MIX $\textcircled{\text{H}}$ /CINEMA SOUND $\textcircled{\text{L}}$ | REC OUT [L] | RECORDING OUTPUT $\textcircled{\text{L}}$ |
| MN. H/M. L | MONAUURAL $\textcircled{\text{H}}$ /MAIN $\textcircled{\text{L}}$ | REC START | RECORDING START |
| MN. H/MAI. L | MONAUURAL $\textcircled{\text{H}}$ /MAIN $\textcircled{\text{L}}$ | REC VR [C] | RECORDING VOLUME (COMMON) |
| MN2/MES. L | MONAUURAL 2/MESECAM $\textcircled{\text{L}}$ | REC VR [L] | RECORDING VOLUME (L) |
| MODE SEL | AUDIO MODE SELECT | REC VR [R] | RECORDING VOLUME (R) |
| MODE SW | AUDIO MODE SW | REC Y | RECORDING LUMINANCE SIGNAL |
| MODE. S. IN | AUDIO MODE SELECT INPUT | REC [H] | RECORDING $\textcircled{\text{H}}$ |
| MODE. S. OUT | AUDIO MODE SELECT OUTPUT | REC. C | RECORDING CHROMINANCE SIGNAL |
| MONO [H] | MONAUURAL $\textcircled{\text{H}}$ | REC. Y | RECORDING LUMINANCE SIGNAL |
| MONO [H]/MAIN [L] | MONAUURAL $\textcircled{\text{H}}$ /MAIN $\textcircled{\text{L}}$ | REC/EE CTL | RECORDING/EE CONTROL |
| MONO2 [L] | MONAUURAL 2 | REEL-T | REEL PULSE (TAKE-UP) |
| MONO2/MESE [FM(L)] | MONAUURAL 2/MESECAM (FM $\textcircled{\text{L}}$) | REEL-S | REEL PULSE (SUPPLY) |
| MOTOR GND | MOTOR GND | REGULATOR FILTER | REGULATOR FILTER |
| MUTE | MUTE | RESET | RESET |
| N. A. REC [L] | NORMAL AUDIO RECORDING | REV M F/R | REVIEW MOTOR |
| N. SW 12V | NON SW 12V | | FORWARD/REVERSE |
| N. SW. 5. DET | NON SW 5V DETECT | REV M V1 | REVIEW MOTOR V1 |
| NICAM | NICAM | REV M V2 | REVIEW MOTOR V2 |
| NICAM [L] | NICAM $\textcircled{\text{L}}$ | REV MOTOR F/R | REVIEW MOTOR |
| NOL [H] | PAL $\textcircled{\text{H}}$ /4.43 NTSC $\textcircled{\text{M}}$ /3.58 NTSC $\textcircled{\text{L}}$ | | FORWARD/REVERSE |
| NOR/SOFT [H] | NORMAL/SOFT TAPE PLAY $\textcircled{\text{H}}$ | REV MOTOR V1 | REVIEW MOTOR V1 |
| NORMAL [H] | NORMAL $\textcircled{\text{H}}$ | REV MOTOR V2 | REVIEW MOTOR V2 |
| NR BIAS | NR BIAS | REV MOTOR [+] | REVIEW MOTOR (+) |
| NTSC [L] | NTSC $\textcircled{\text{L}}$ | REV MOTOR [-] | REVIEW MOTOR (-) |
| OCH | CONTROL AGC CIRCUIT | REV. M. GND | REVIEW MOTOR GND |
| OUT | OUTPUT | RF. CHROMA | RF CHROMINANCE SIGNAL |

| | | | |
|-----------------|--|------------------|--|
| RF OUT | RF OUTPUT | SYSCON 5V | SYSTEM CONTROL 5V |
| RF Y | RF LUMINANCE SIGNAL | SYSTEM | SYSTEM SW |
| RF. Y. IN | RF LUMINANCE SIGNAL INPUT | T-PHOTO | TAKE-UP PHOTO TRANSISTOR |
| RF. Y. OUT | RF LUMINANCE SIGNAL OUTPUT | T-RL. PLS | TAKE-UP REEL PULSE |
| ROTAR. SW | ROTARY SW | T. BUSCLK | TIMER BUS CLOCK |
| ROTARY | ROTARY SW | T. BUSLSN | TIMER BUS LISTEN |
| RST | RESET | T. BUSTLK | TIMER BUS TALK |
| RST [L] | RESET \textcircled{L} | T. END [L] | TAPE END \textcircled{L} |
| Rch/INST | Rch/INSERT | T. PHOTO | TAKE-UP PHOTO TRANSISTOR |
| S IN | SERIAL DATA INPUT | TAPE END [L] | TAPE END \textcircled{L} |
| S OUT | SERIAL DATA OUTPUT | TAPE END [L]/CAM | TAPE END \textcircled{L} /CAMERA PAUSE |
| S-PHOTO | SUPPLY PHOTO TRANSISTOR | TEST | TEST MODE |
| S-RL. PLS | SUPPLY REEL PULSE | TPZ | TRAPEZOIDAL WAVE CIRCUIT |
| S. CLK | SERIAL CLOCK | TRIC [L] | TRIC PLAY \textcircled{L} |
| S. CLK/AV | SERIAL CLOCK/AV | TRICK [L] | TRIC PLAY \textcircled{L} |
| S. DATA | SERIAL DATA | TRK. ENV | AUTO TRACKING ENVELOPE DETECT |
| S. DATA/A | SERIAL DATA | TU. AUDIO | TUNER AUDIO |
| S. PHOTO | SUPPLY PHOTO TRANSISTOR | TU. GND | TUNER GND |
| S. TAB [L] | SAFETY TAB SW ON \textcircled{L} | TU. V. IN | TUNER VIDEO SIGNAL INPUT |
| S/P/N | SECAM/PAL/NTSC | TU. VIDEO | TUNER VIDEO |
| SC IN | SERIAL CLOCK INPUT | TUN NOR IN | TUNER NORMAL INPUT |
| SC OUT | SERIAL CLOCK OUTPUT | TUN R | TUNER AUDIO (R) |
| SCK SELECT | SERIAL CLOCK SELECT | TUN. AUDIO IN | TUNER AUDIO INPUT |
| SEL OUT [L] | SELECT OUTPUT (L) | TUNER 12V | TUNER 12V |
| SEL OUT [R] | SELECT OUTPUT (R) | TUNER L | TUNER AUDIO (L) |
| SHUTTLE 1 | SHUTTLE 1 | TUNER V IN | TUNER VIDEO SIGNAL INPUT |
| SIF | SOUND INTERMEDIATE FREQUENCY | TUNER [L] | TUNER AUDIO (L) |
| SLMUT [H] | INPUT SELECT MUTE \textcircled{H} | TUNER [N] | TUNER AUDIO (NORMAL) |
| SLNID [+] | SOLENOID (+) | TUNER [R] | TUNER AUDIO (R) |
| SLNID [-] | SOLENOID (-) | TUNER. 12 | TUNER 12V |
| SLW TR. MM | SLOW TRACKING MONO MULTI | TUOFF [H] | TUNER OFF \textcircled{H} |
| SLW TR. REF | SLOW TRACKING REFERENCE | TV. AUDIO | TV AUDIO |
| | VOLTAGE | TV/VTR | TV/VTR |
| SNS. GND | SENSOR GND | TXTON [L] | TEXT ON \textcircled{L} |
| SOFT [H] | SOFT TAPE PLAY \textcircled{H} | U. REG45V | UNREGULATOR 45V |
| SOFT [H]/NORMAL | SOFT TAPE PLAY \textcircled{H} /NORMAL \textcircled{H} | UNREG | UNREGULATOR |
| SOLENOID ON [L] | SOLENOID ON \textcircled{L} | UNREG19V | UNREGULATOR 19V |
| SP [H] | SP \textcircled{H} | V. REF | REFERENCE VOLTAGE |
| SP/L/SLP | SP/LP | V. EE [H] | VIDEO EE \textcircled{H} |
| SSS [L] | SLOW/STILL/STOP | V. EE [L] | VIDEO EE \textcircled{L} |
| STEREO LED | STEREO LED | VCO REF | REFERENCE OSCILLATER |
| STEREO [H] | STEREO \textcircled{H} | VD. IN | VIDEO SIGNAL INPUT |
| STEREO [L] | STEREO \textcircled{L} | VD. OUT | VIDEO SIGNAL OUTPUT |
| STOP. PO | STOP POSITION | VIDEO EE [L] | VIDEO EE \textcircled{L} |
| STOP/5V | STOP POSITION/5V | VIDEO IN | VIDEO SIGNAL INPUT |
| STOP1/TAPE SEL | STOP1 POSITION/TAPE SELECT | VIDEO OUT | VIDEO SIGNAL OUTPUT |
| STOP1/PAL:ST | STOP1 POSITION/PAL | VM | MOTOR VOLTAGE |
| STOP2. PO | STOP 2 POSITION | VM DOWN [L] | MOTOR VOLTAGE DOWN \textcircled{L} |
| STOP2/S-TAB | STOP 2 POSITION/SAFETY TAB SW | VSS | VERTICAL SYNC SIGNAL |
| STREO [H] | STEREO \textcircled{H} | VTR [H] | VTR \textcircled{H} |
| SUB BIAS | SUB BIAS | VTR. 12V | VTR 12V |
| SUB. SW | SUB SW | X IN | OSCILLATOR INPUT |
| SVHS CAS [L] | S-VHS CASSETTE \textcircled{L} | X OUT | OSCILLATOR OUTPUT |
| SW. 5. DET | SW 5V DETECT | | |
| SYNC [L] | SYNC \textcircled{L} | | |

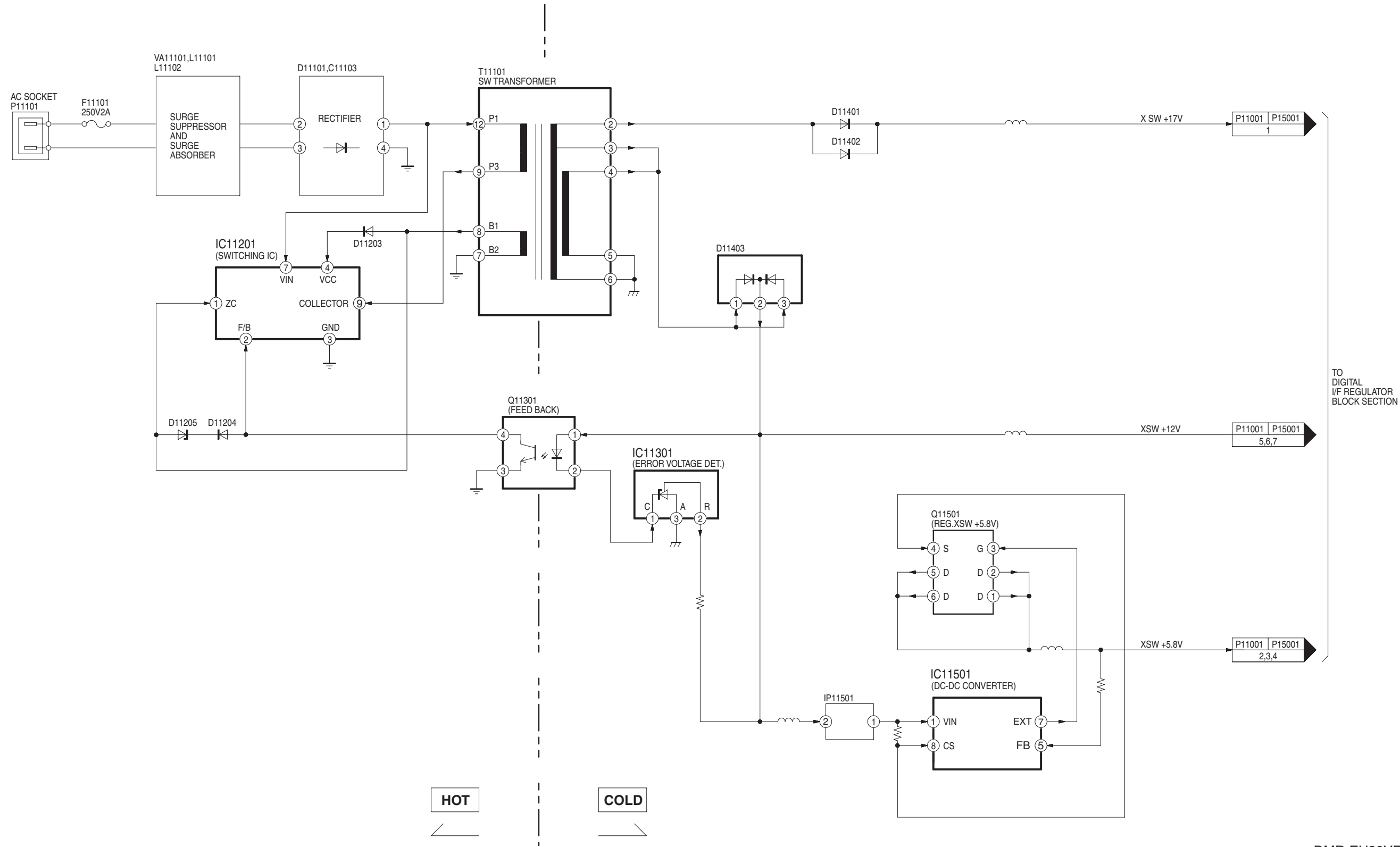
22 INTERCONNECTION DIAGRAM



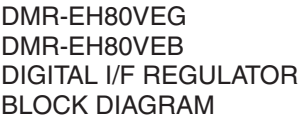
DMR-EH80VEG
DMR-EH80VEB
INTERCONNECTION DIAGRAM

23 BLOCK DIAGRAM

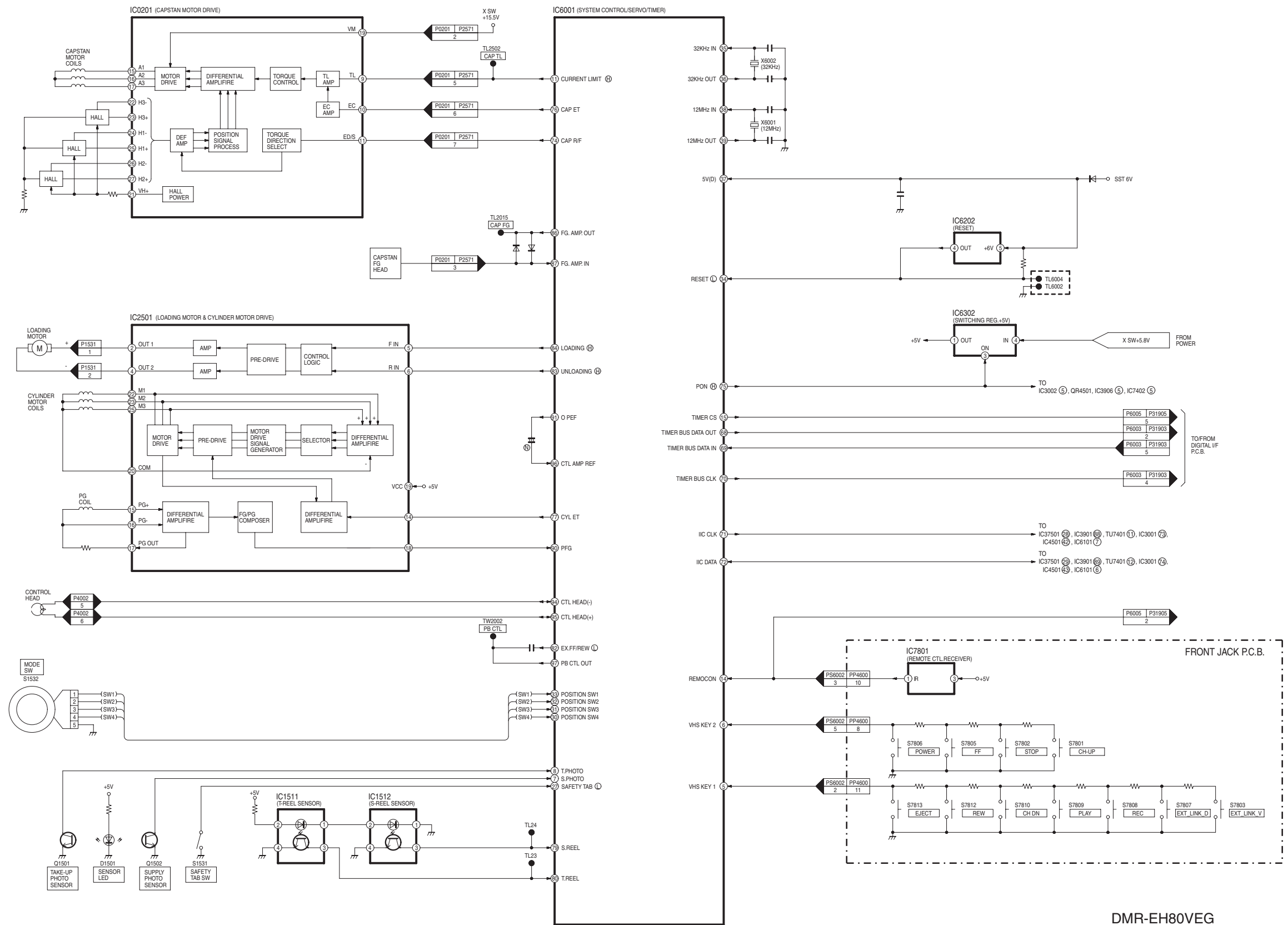
23.1. POWER SUPPLY BLOCK DIAGRAM



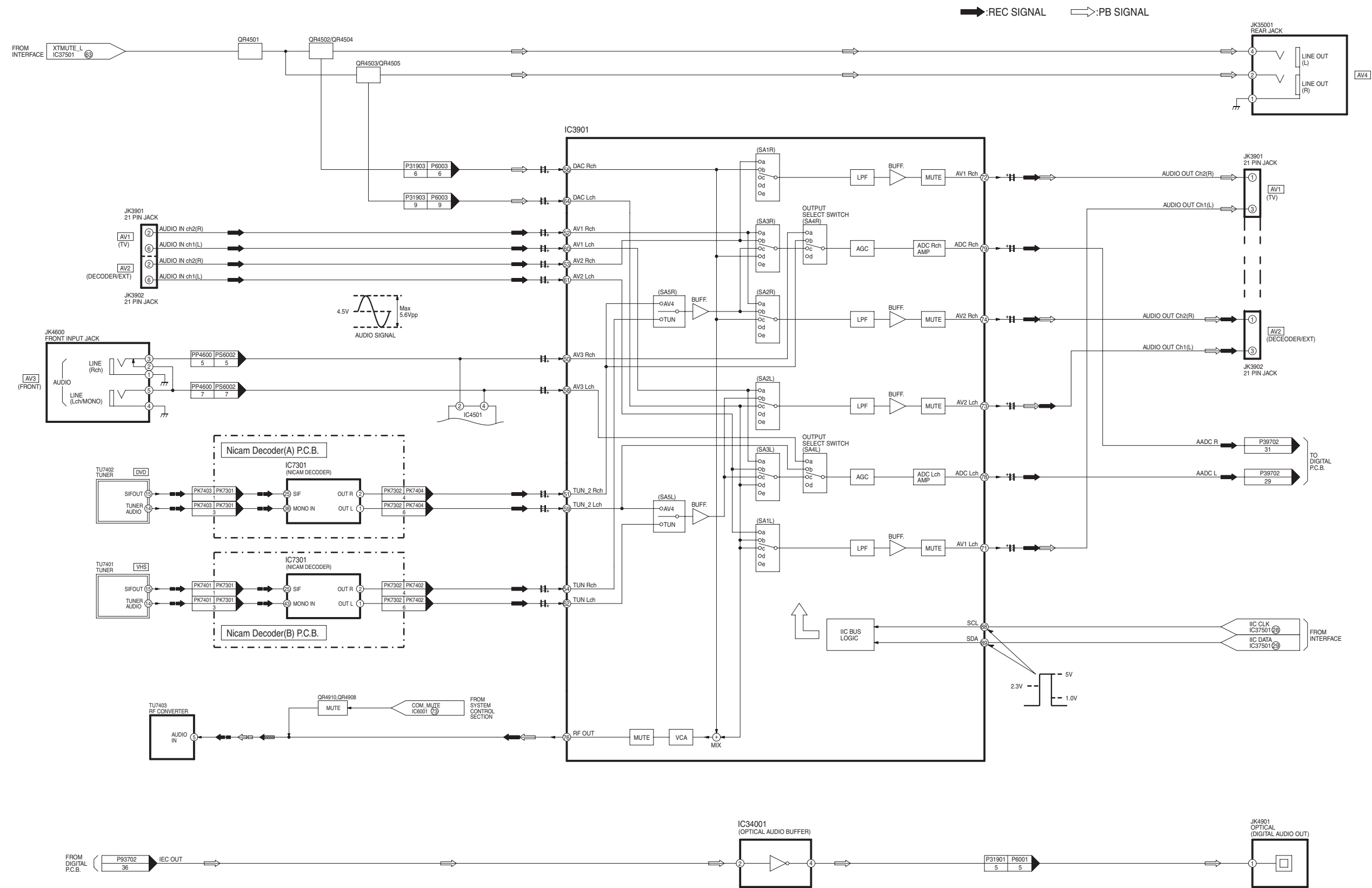
DMR-EH80VEG
DMR-EH80VEB
POWER SUPPLY
BLOCK DIAGRAM



23.3. SYSTEM CONTROL, SERVO & TIMER BLOCK DIAGRAM

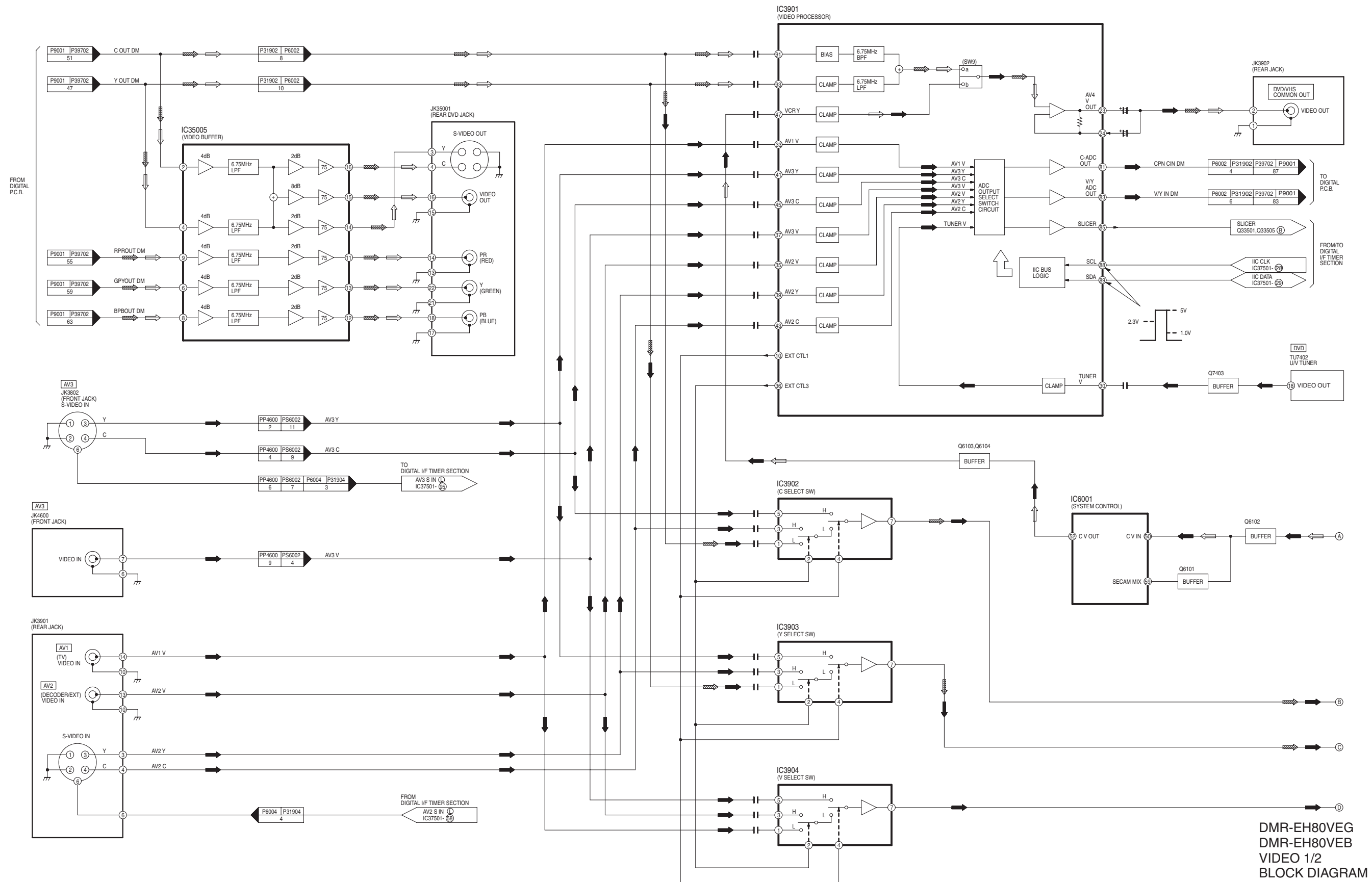


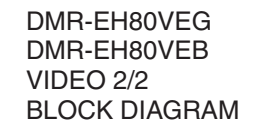
23.4. AUDIO BLOCK DIAGRAM

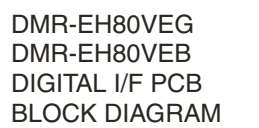


DMR-EH80VEG
DMR-EH80VEB
AUDIO
BLOCK DIAGRAM

23.5. VIDEO BLOCK DIAGRAM

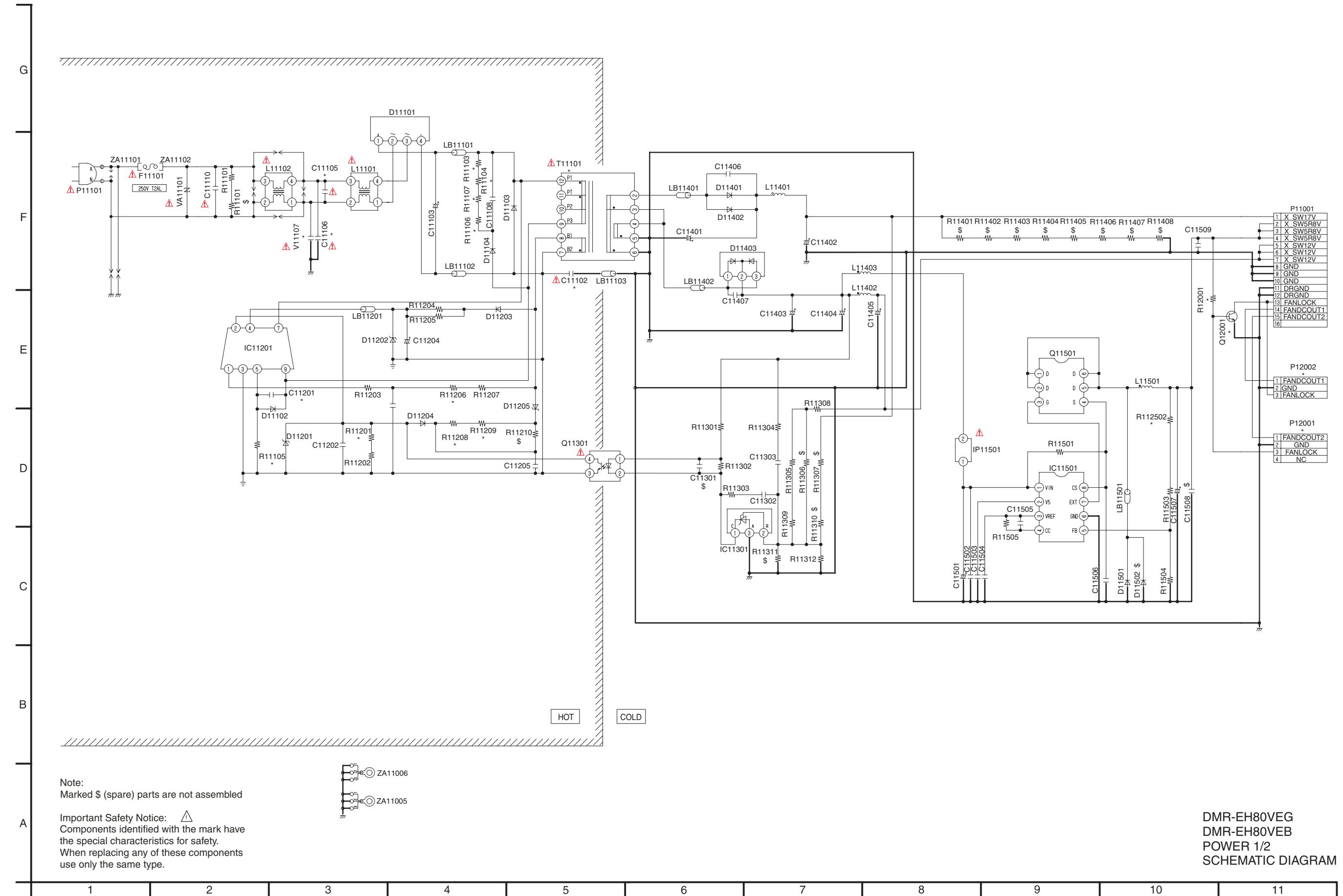
DMR-EH80VEG
DMR-EH80VEB
VIDEO 1/2
BLOCK DIAGRAM

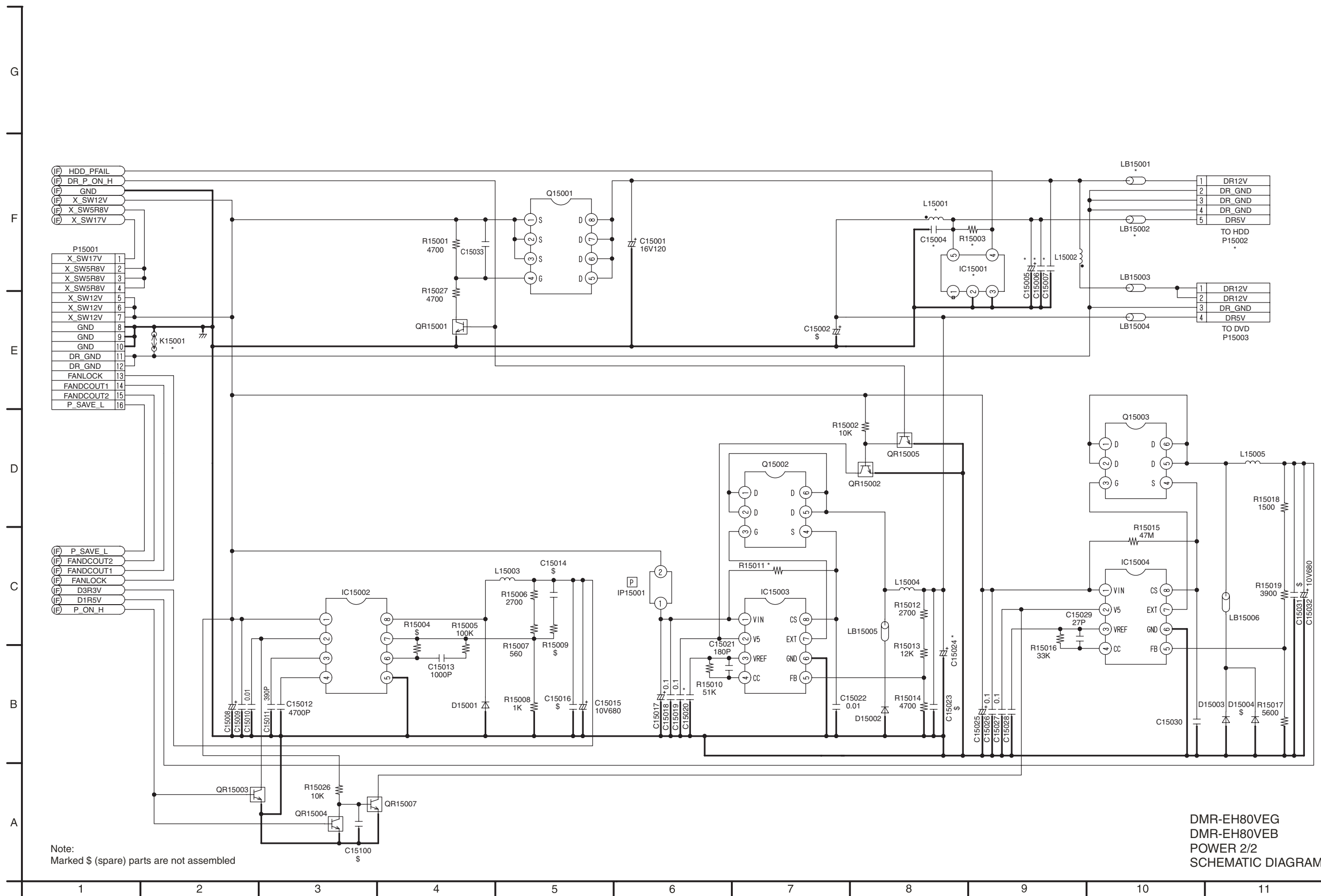




24 SCHEMATIC DIAGRAM

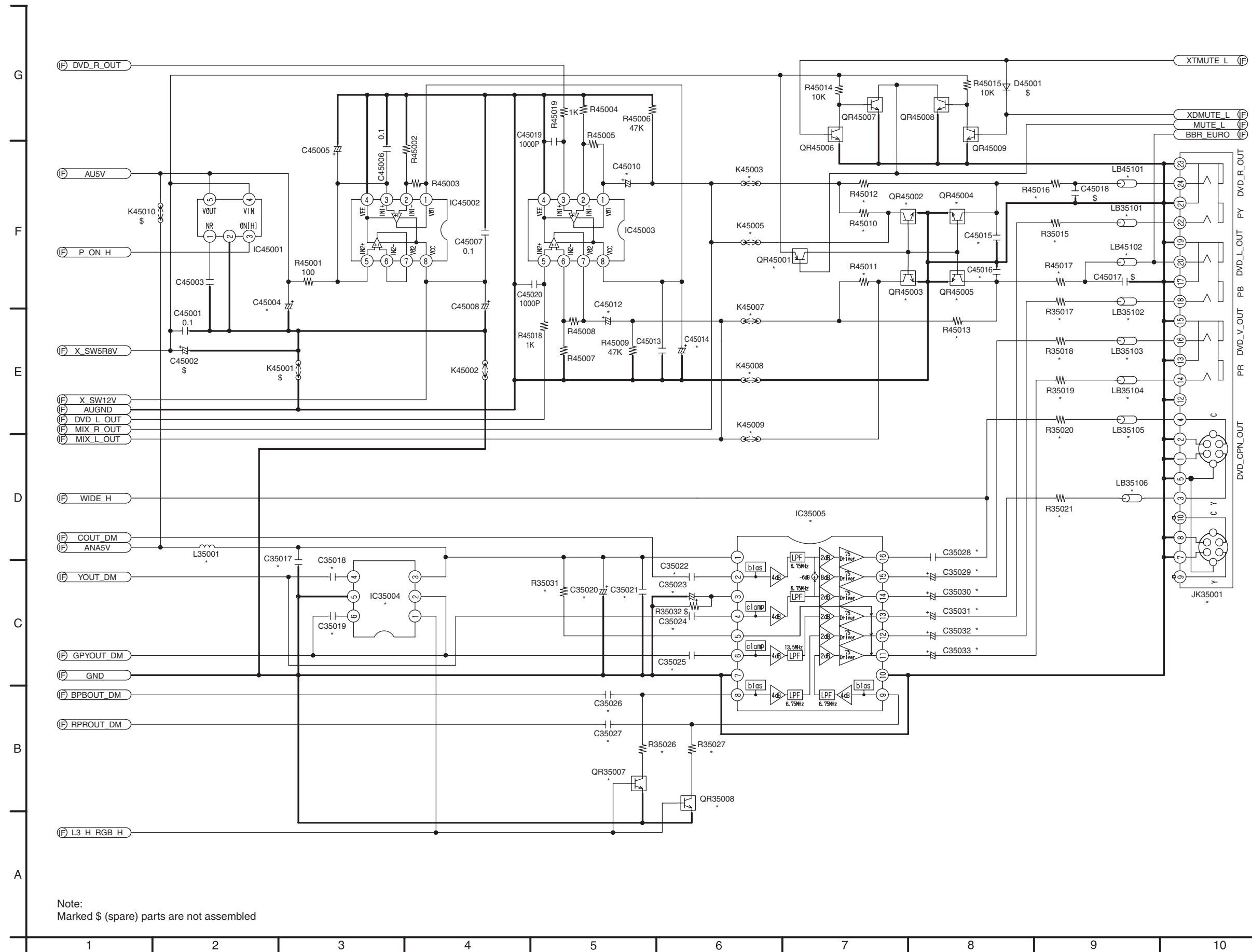
24.1. POWER SUPPLY



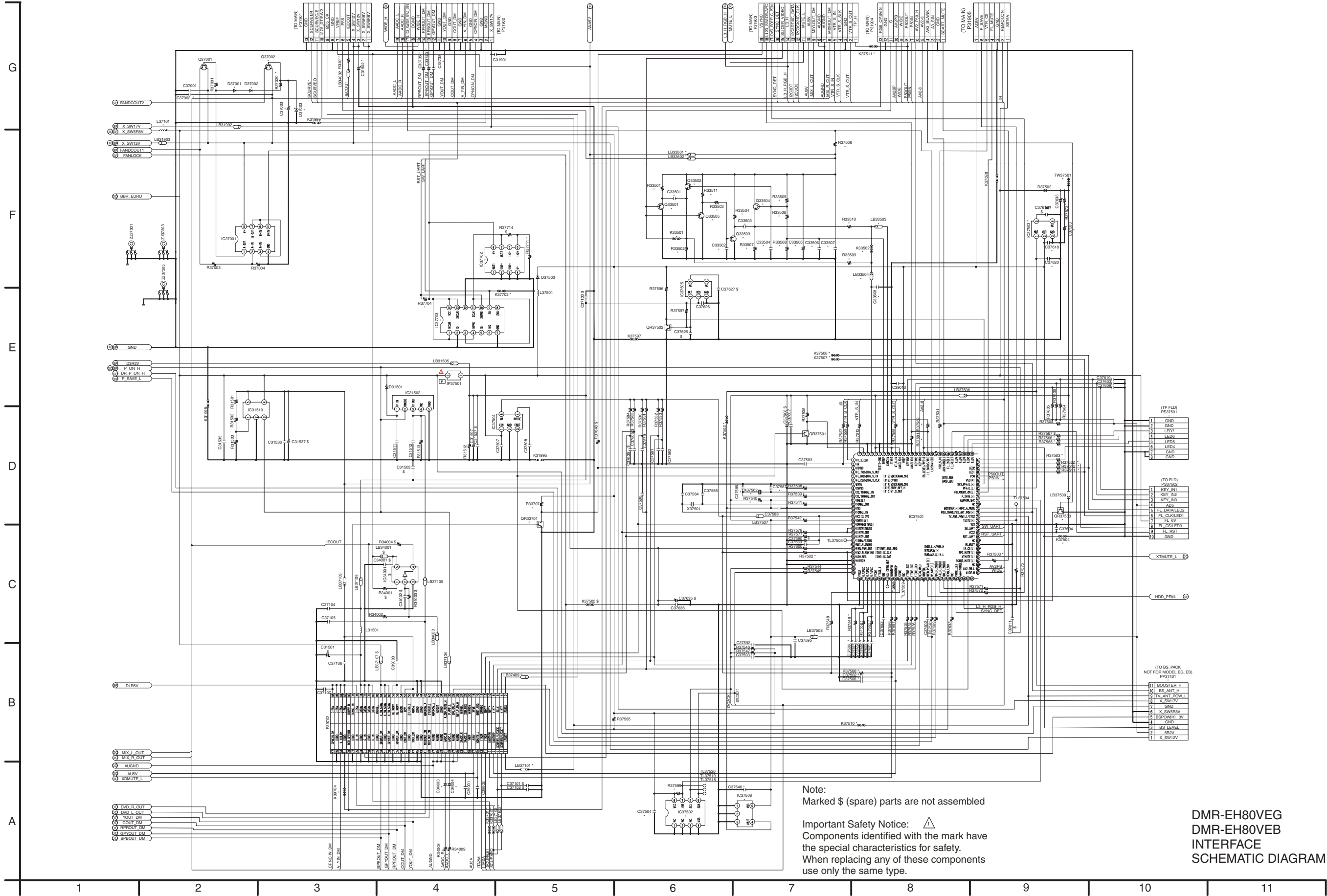


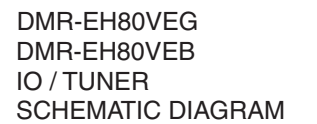
DMR-EH80VEG
DMR-EH80VEB
POWER 2/2
SCHEMATIC DIAGRAM

24.2. DVD OUTPUT

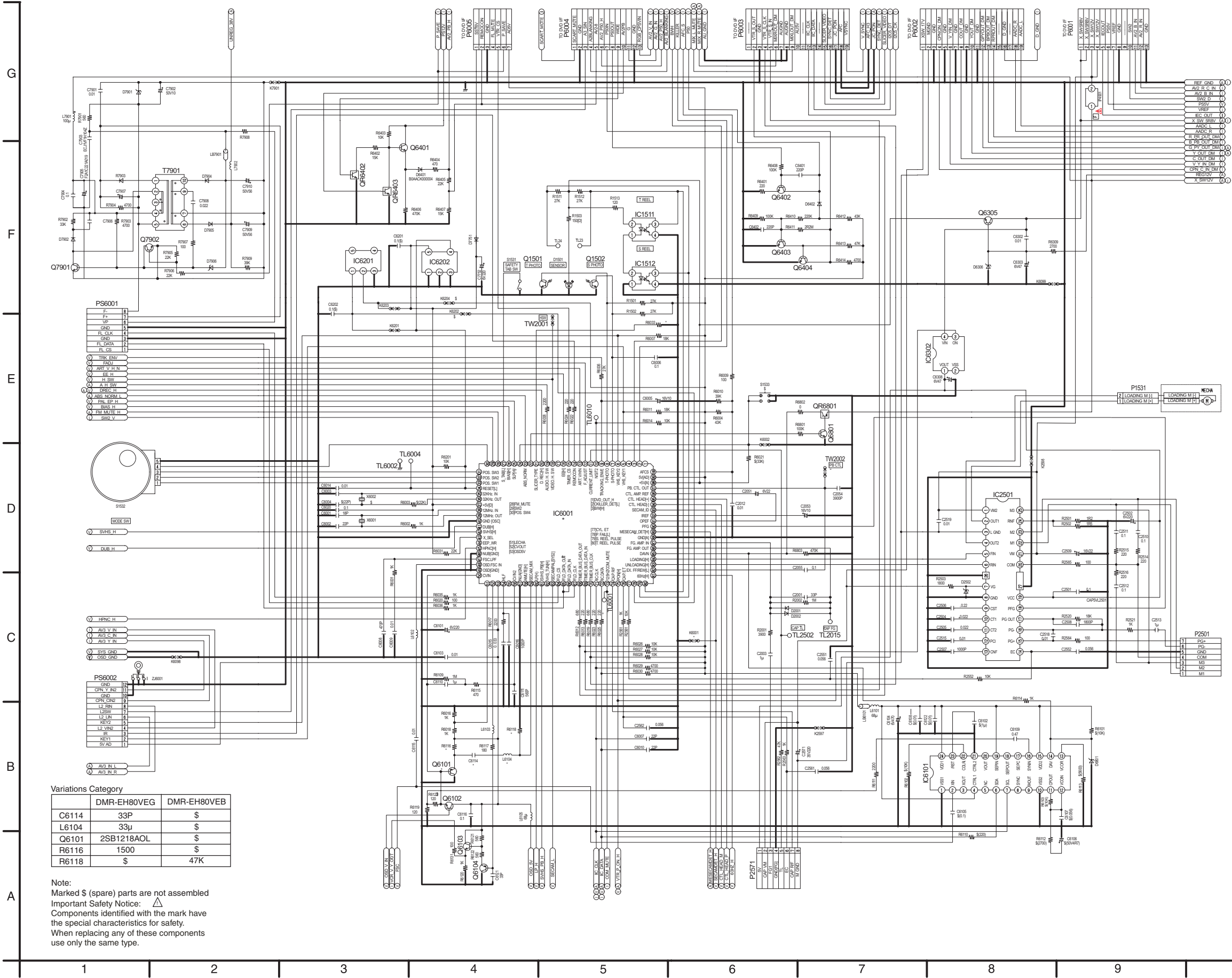


24.3. INTERFACE

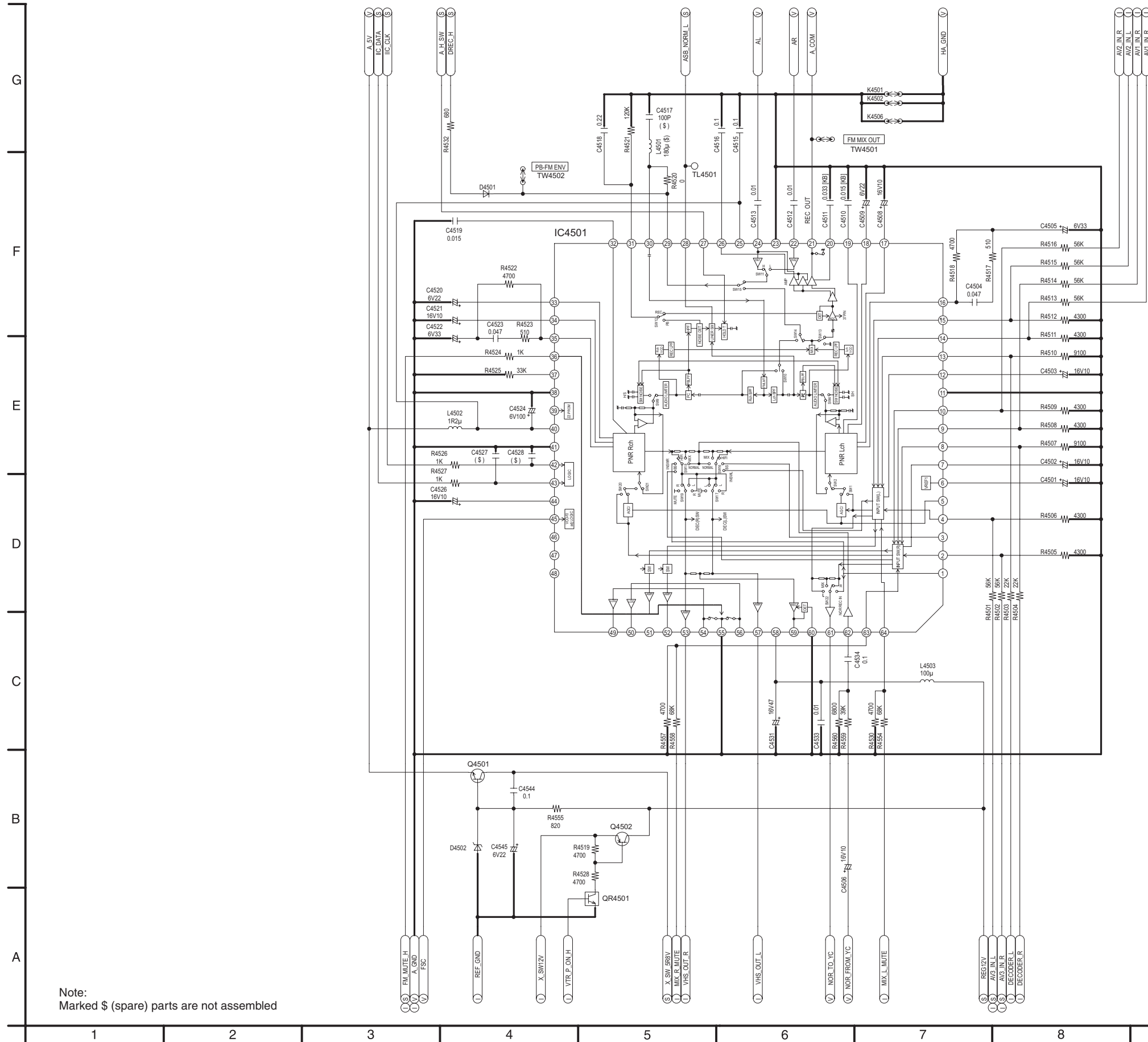




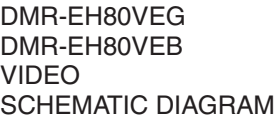
24.5. SYSCON / SERVO / TIMER MAIN



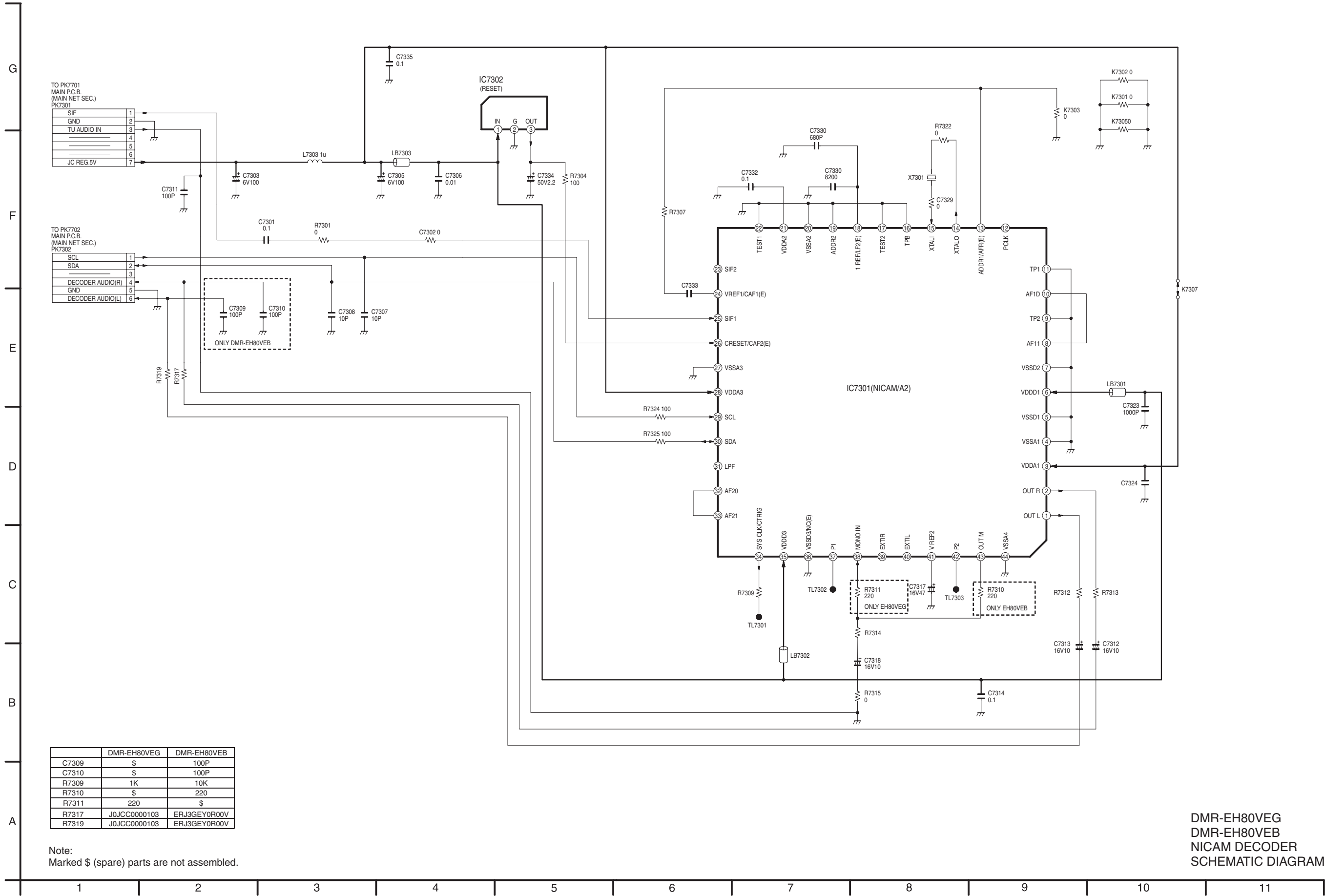
24.6. VHS AUDIO



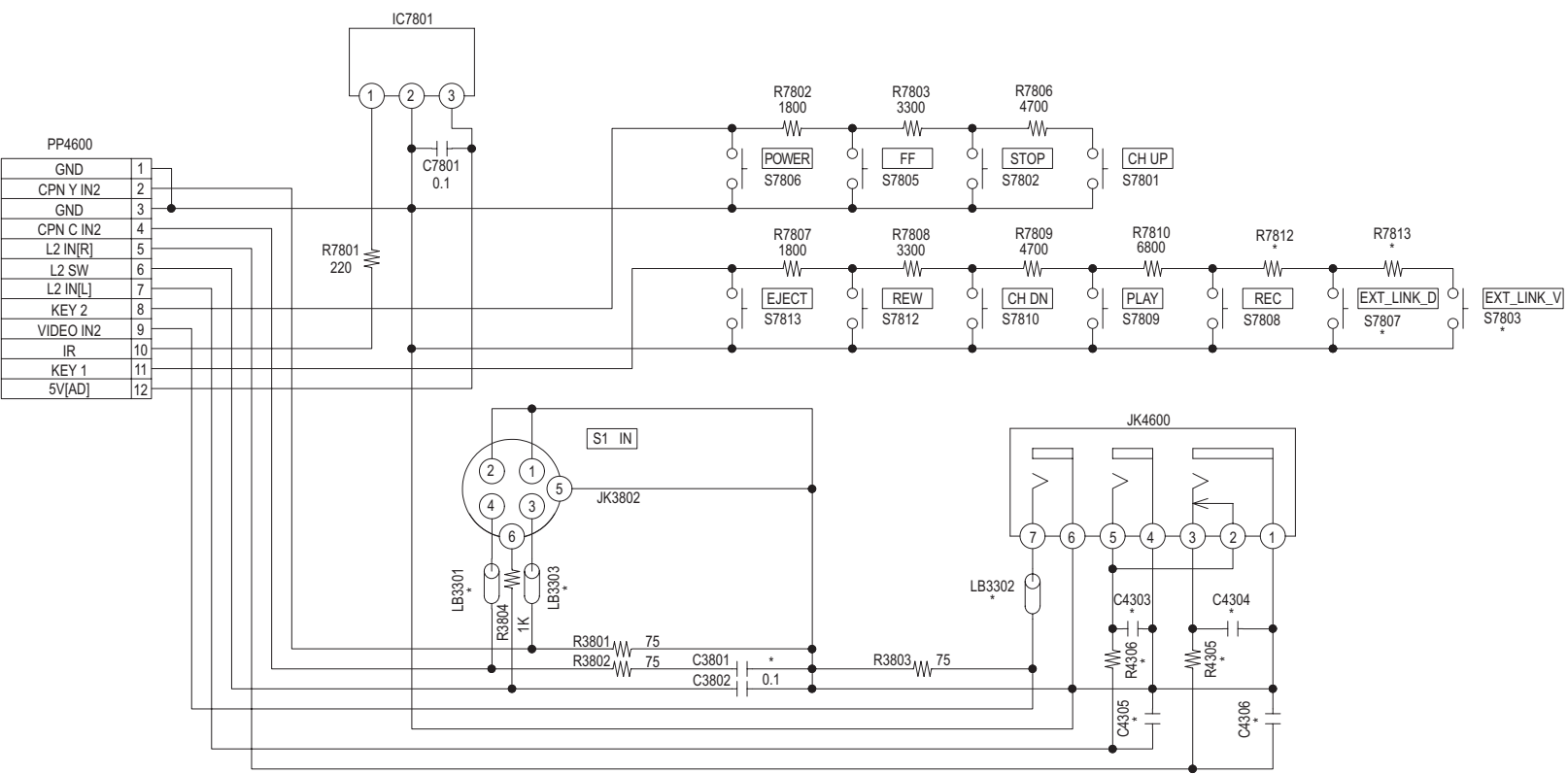
DMR-EH80VEG
DMR-EH80VEB
VHS AUDIO
SCHEMATIC DIAGRAM



24.8. NICAM DECODER



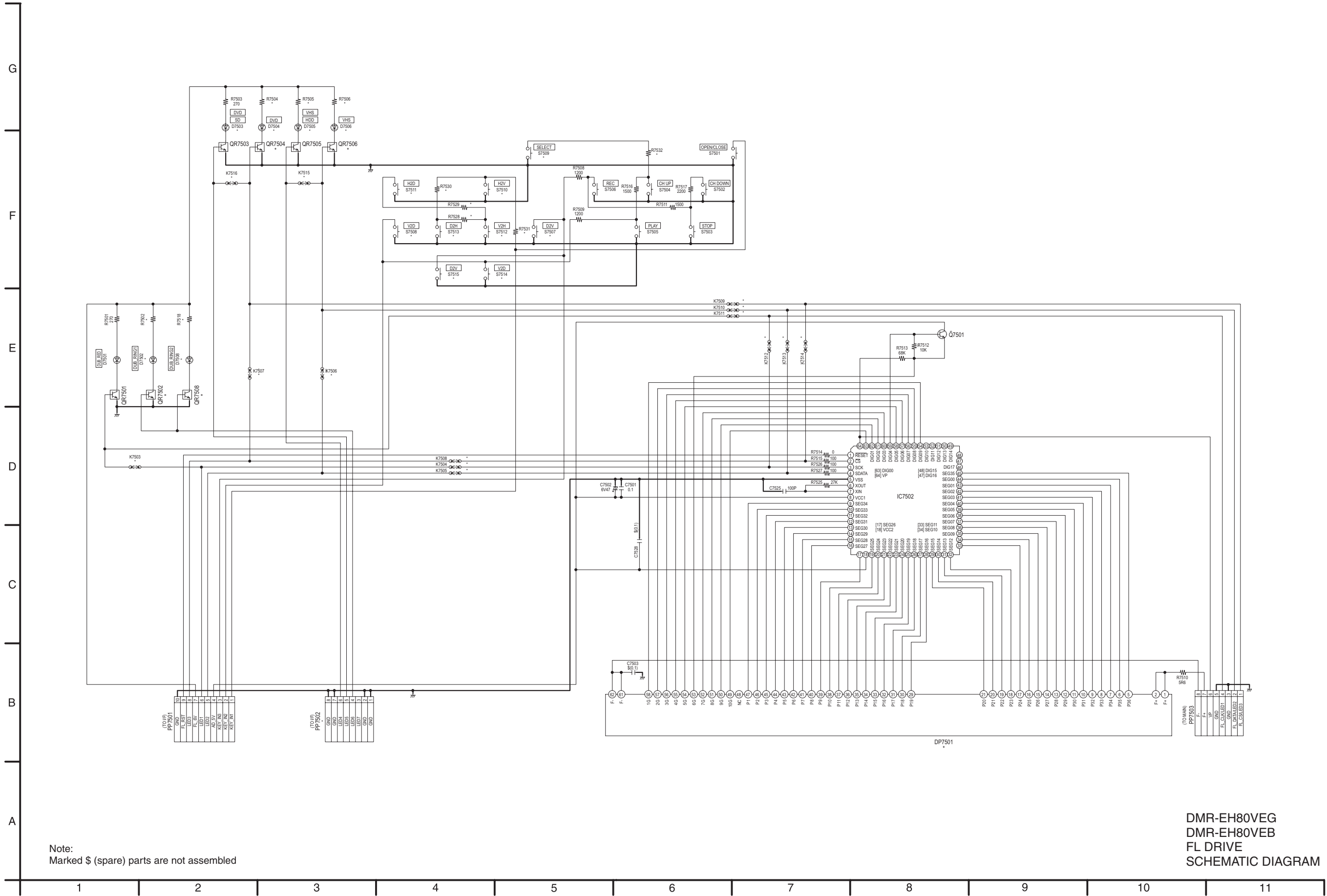
24.9. FRONT JACK

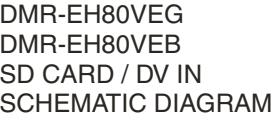


Note:
Marked \$ (spare) parts are not assembled

DMR-EH80VEG
DMR-EH80VEB
FRONT JACK
SCHEMATIC DIAGRAM

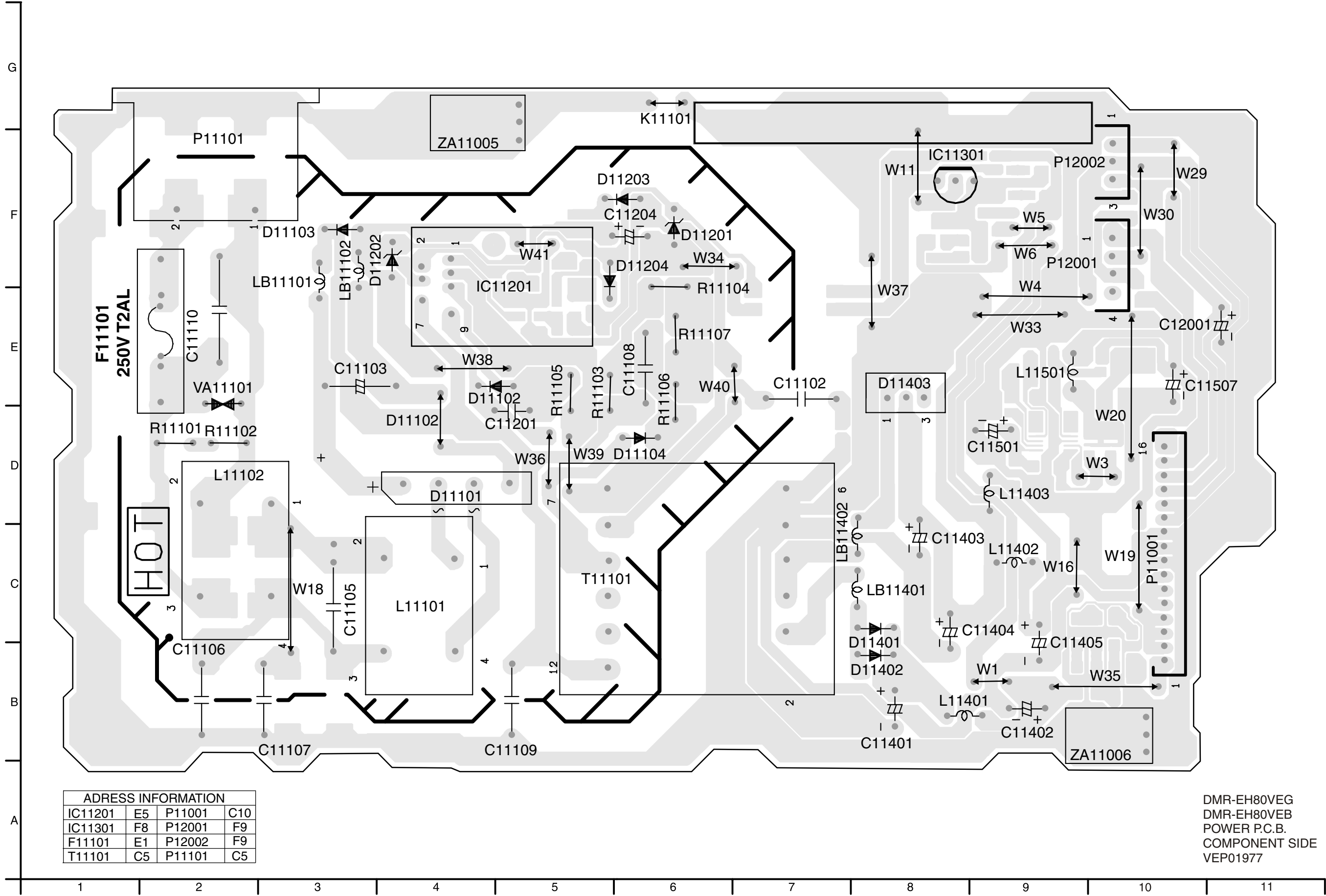
24.10. FL DRIVE

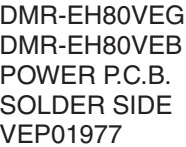


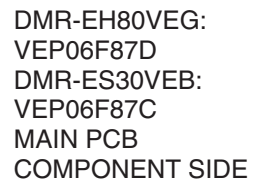


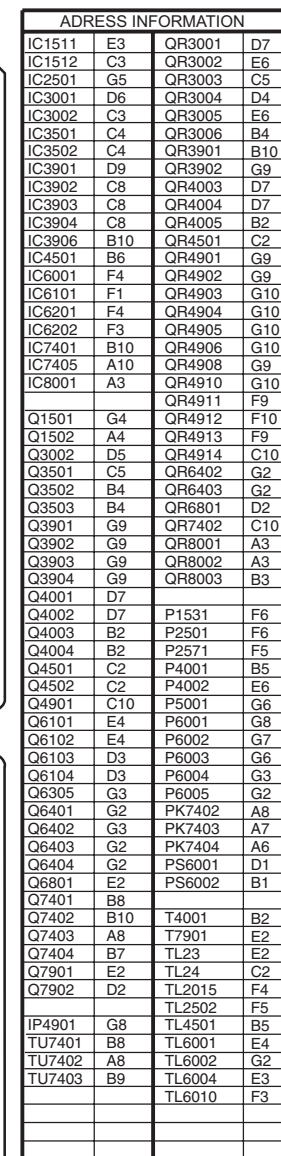
25 PRINTED CIRCUIT BOARD

25.1. POWER P.C.B. (COMPONENT SIDE)

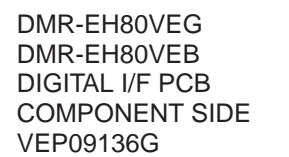




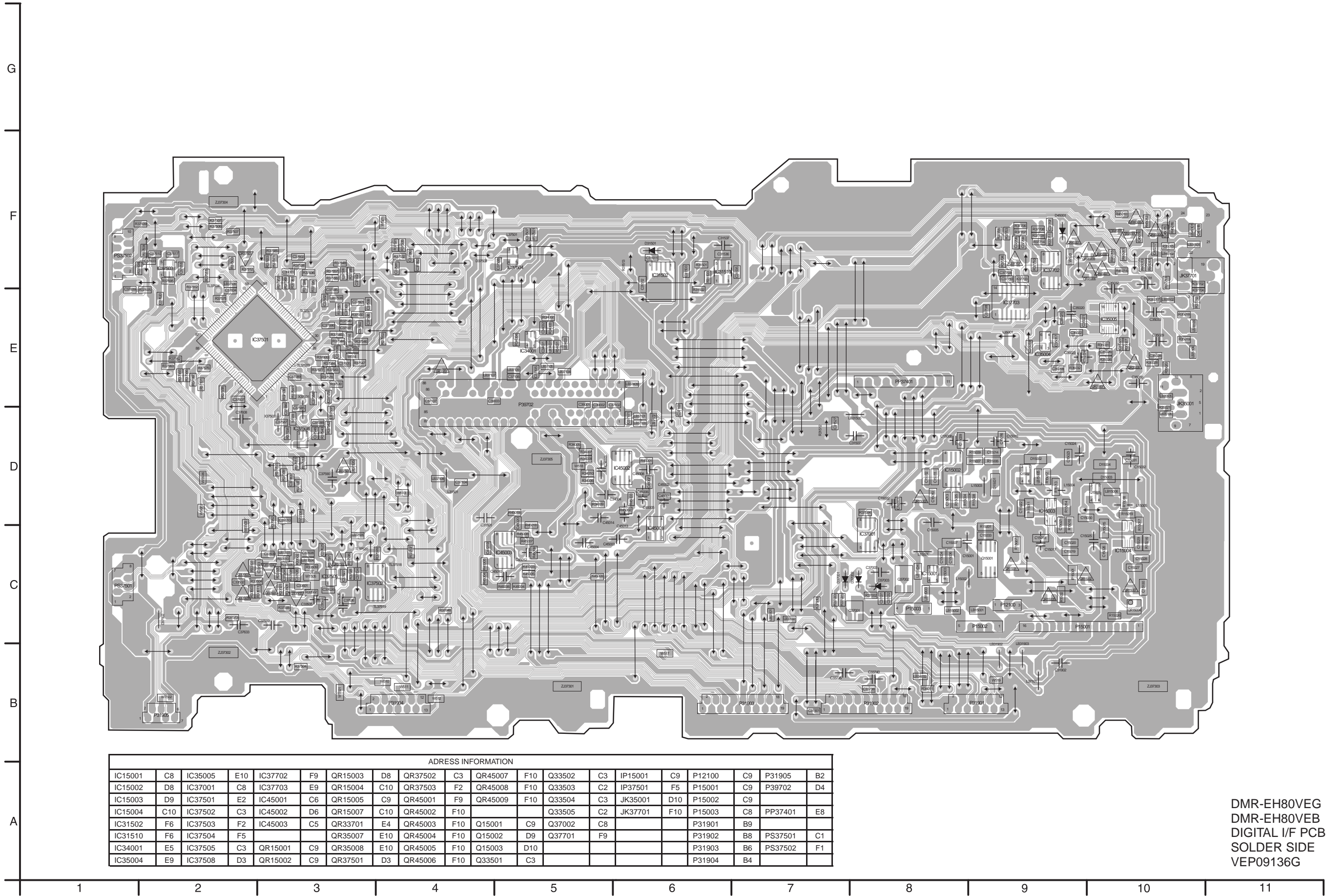




92

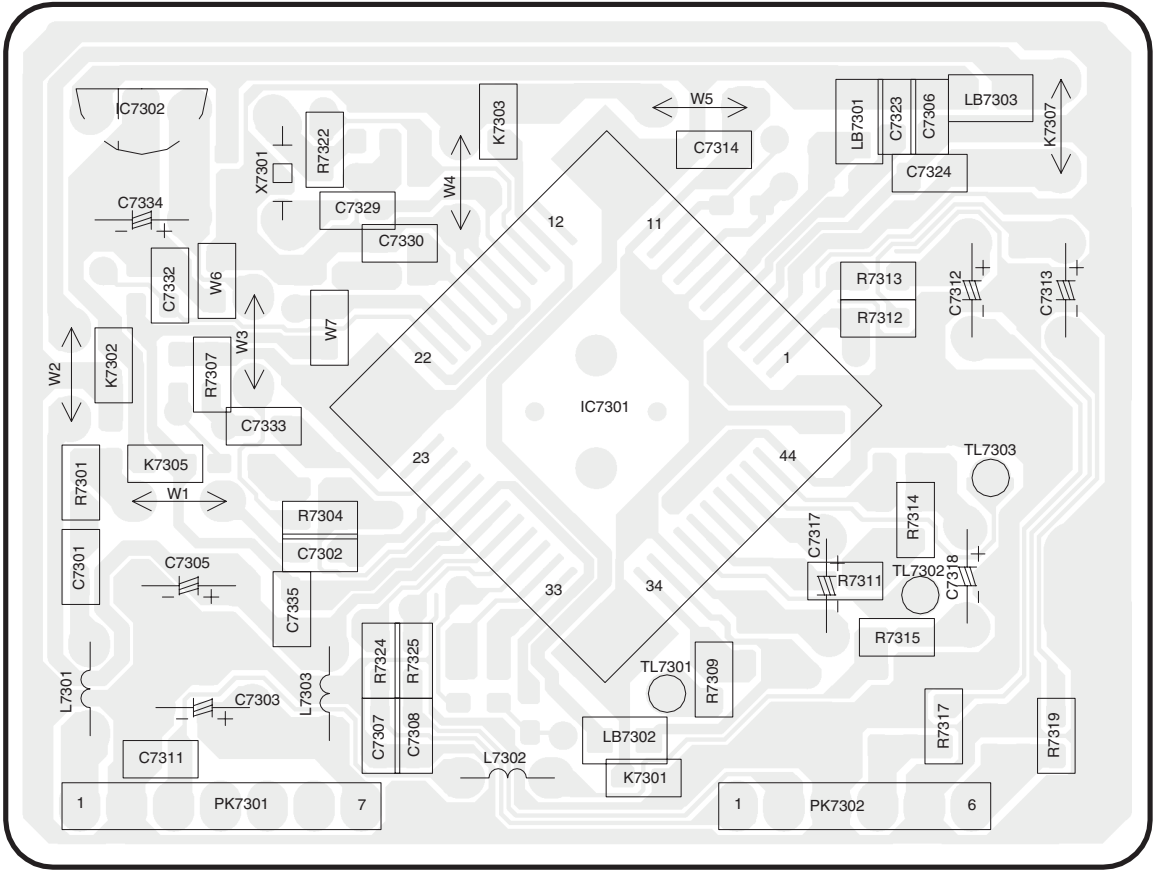


25.6. DIGITAL I/F P.C.B. (SOLDER SIDE)



25.8. NICAM DECODER P.C.B. (VEP07A51F)

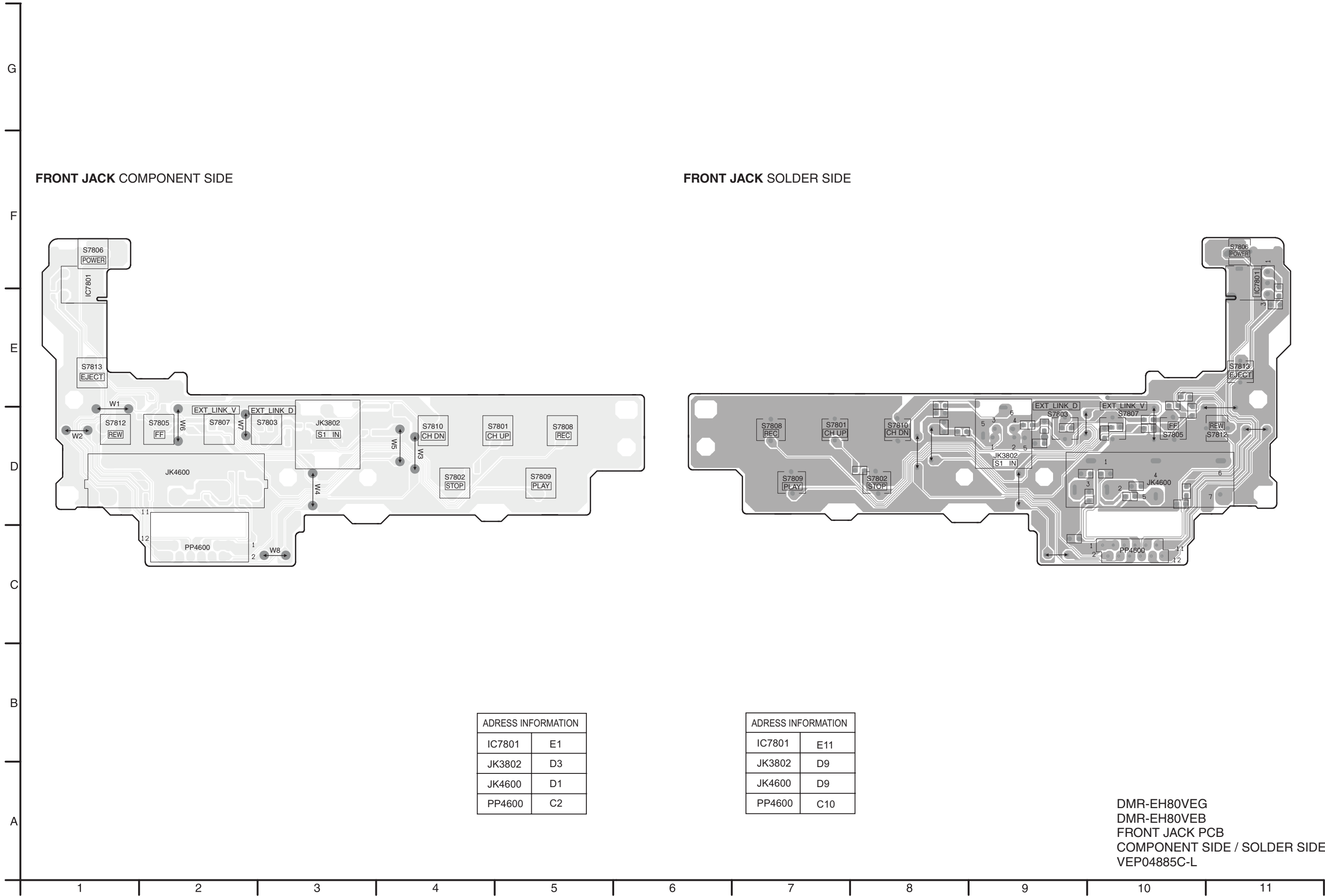
Nicam Decoder P.C.B. (VEP07A51F)



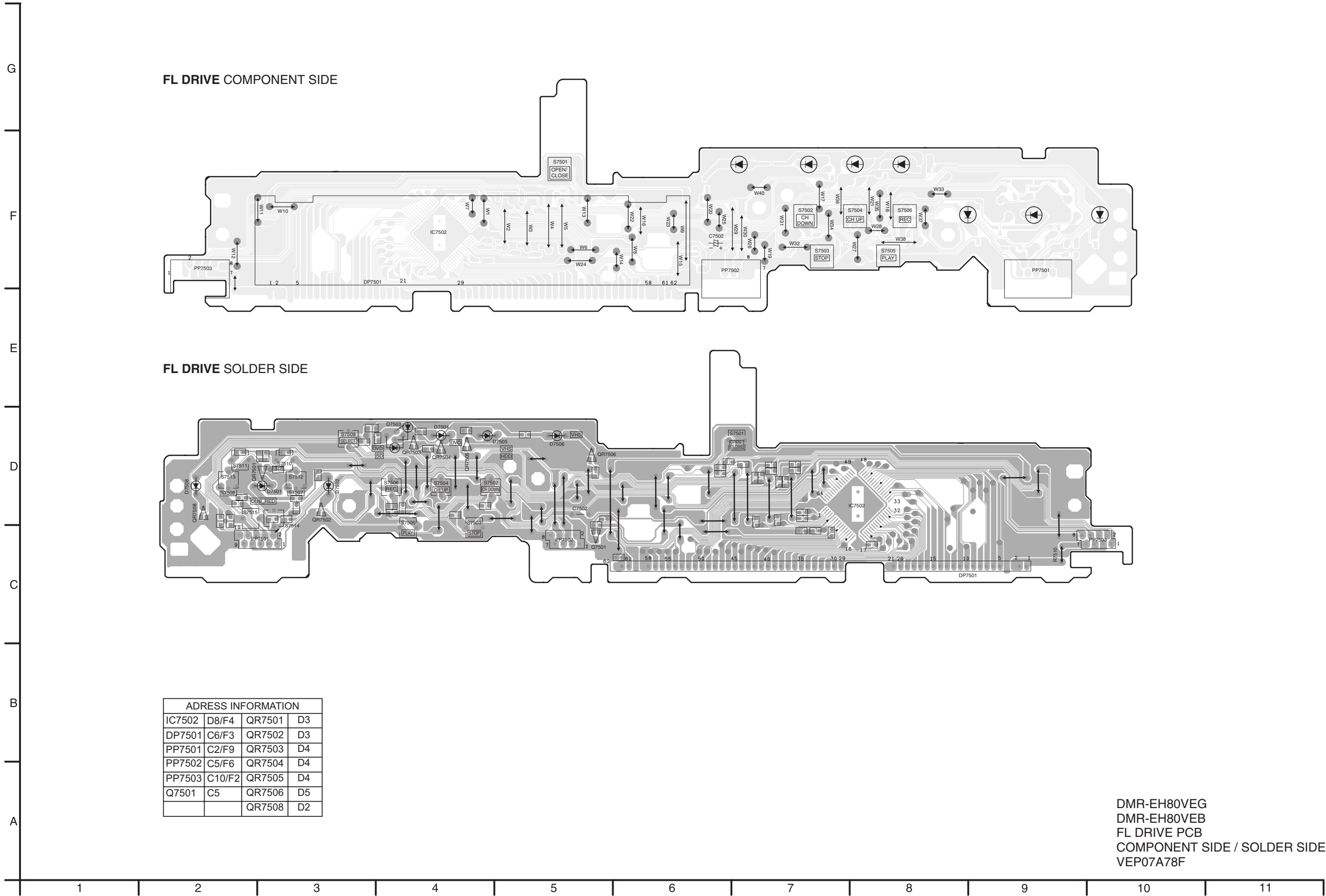
| VEP07A51F | |
|---------------------|----|
| IC7301 | D3 |
| IC7302 | F1 |
| PK7301 | C2 |
| PK7302 | C4 |
| TL7301 | D3 |
| TL7302 | C5 |
| TL7303 | D5 |
| X7301 | E2 |
| ADDRESS INFORMATION | |

DMR-EH80VEG
NICAM DECODER PCB
COMPONENT SIDE

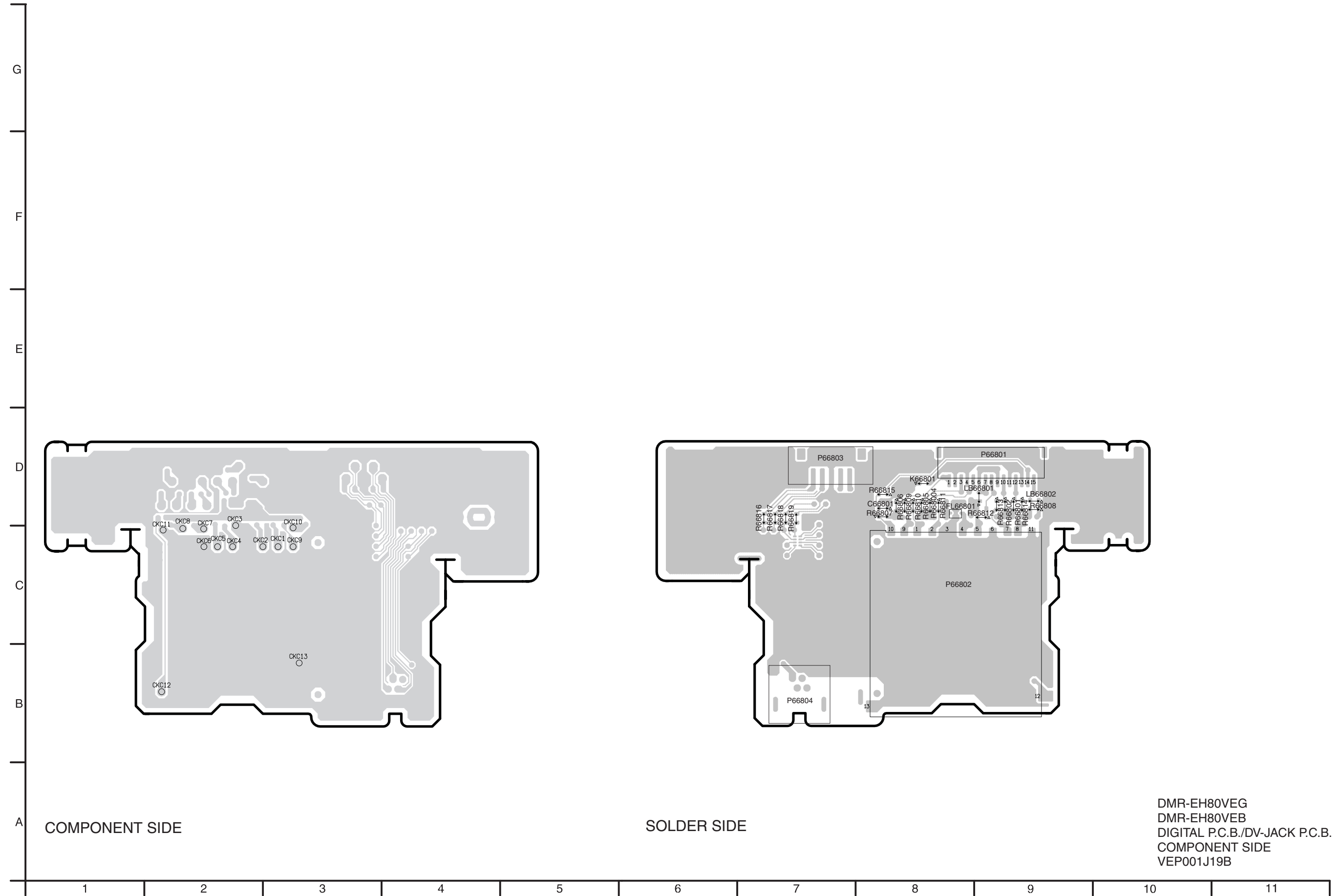
25.9. FRONT JACK P.C.B.



25.10. FL DRIVE P.C.B.

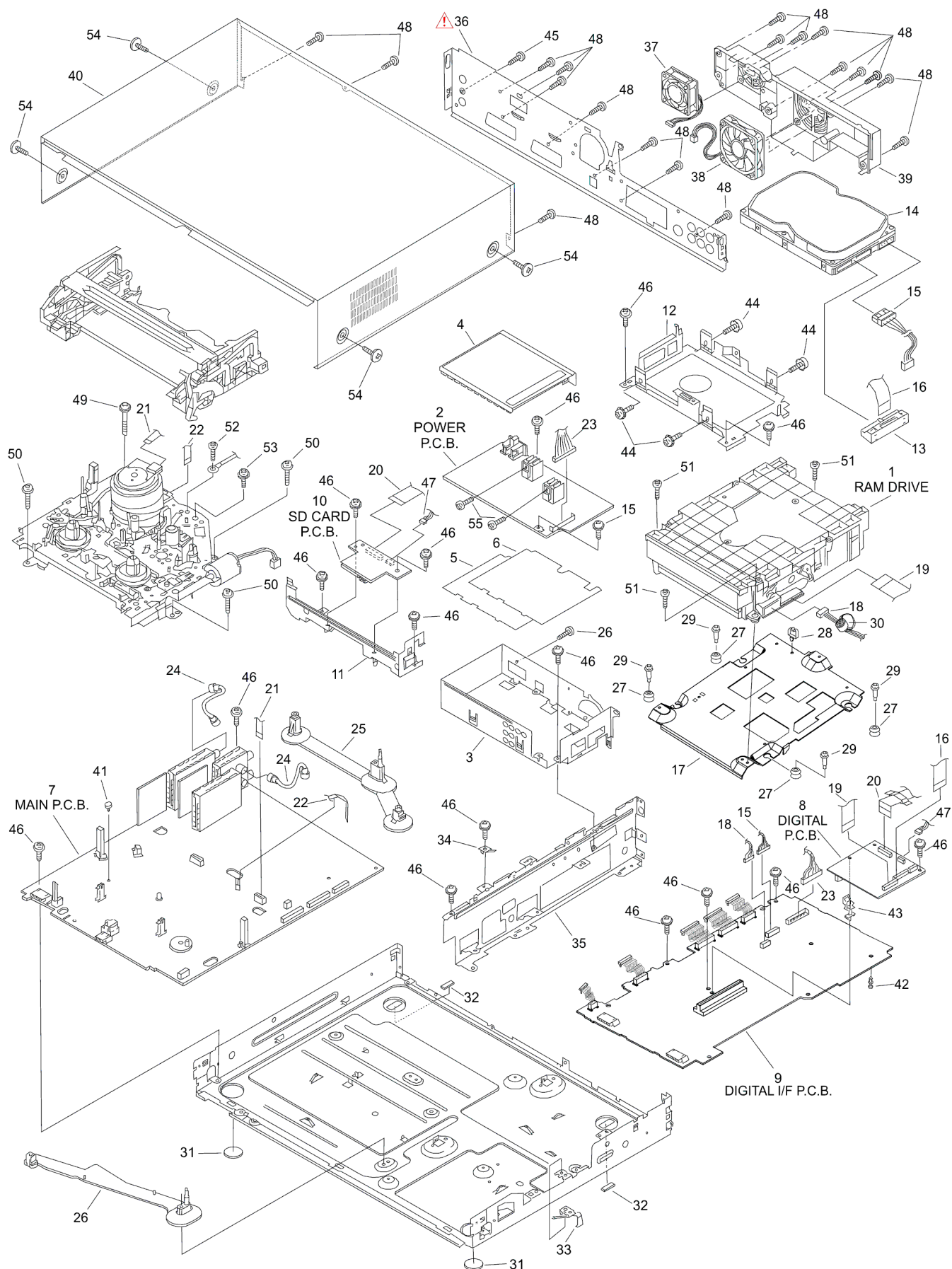


25.11. SD CARD P.C.B.

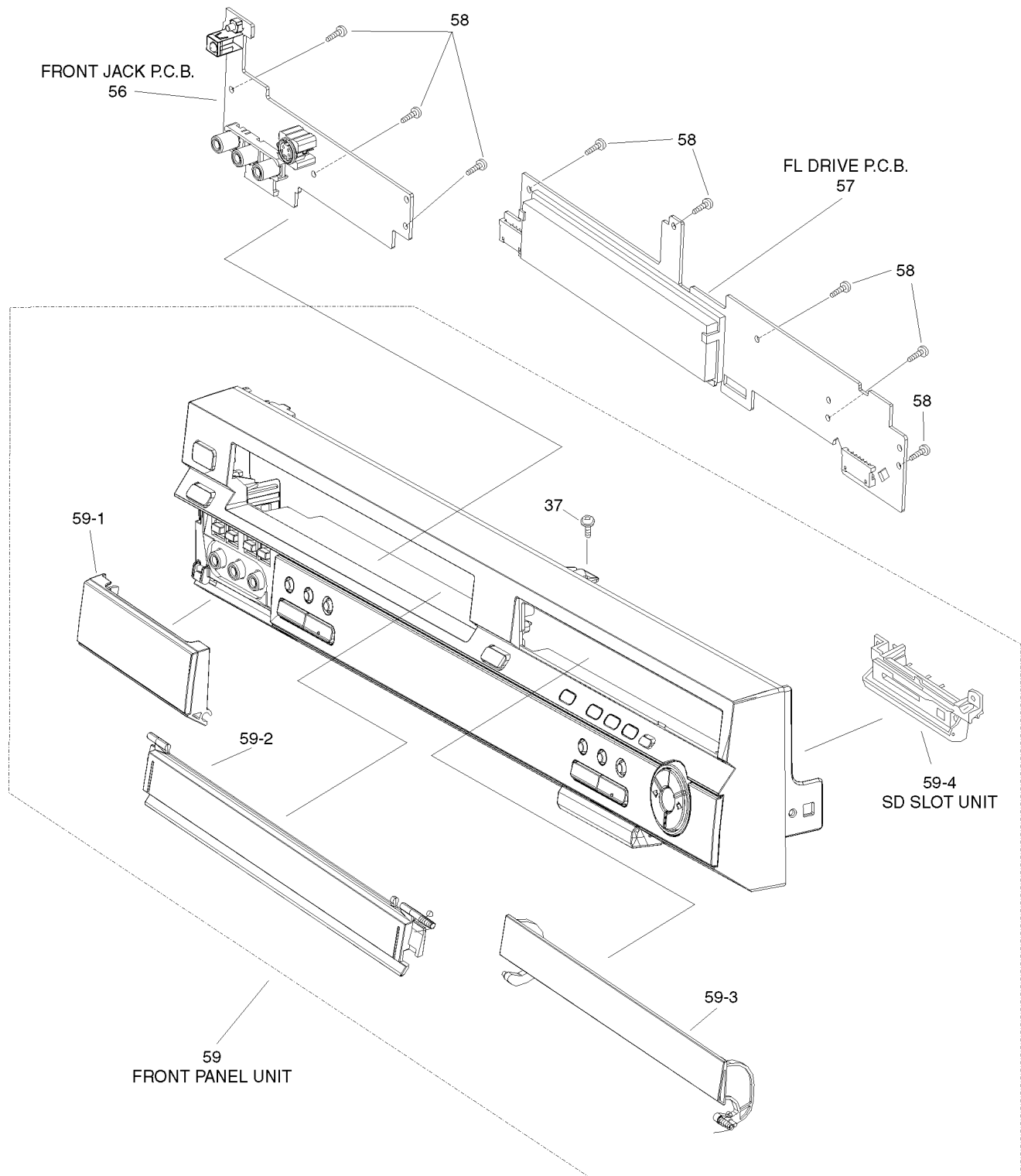


26 EXPLODED VIEWS

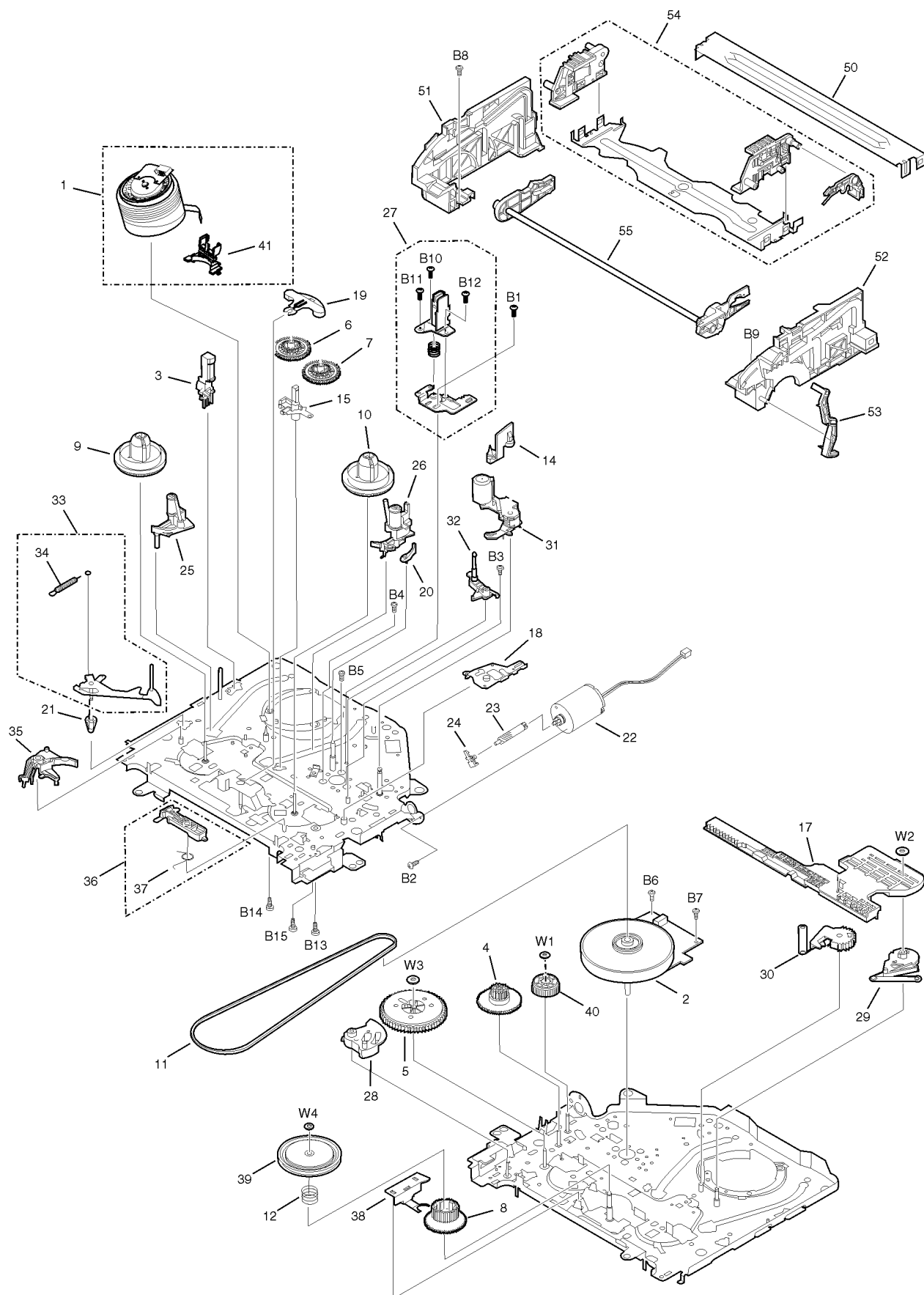
26.1. MECHANISM & CASING PARTS



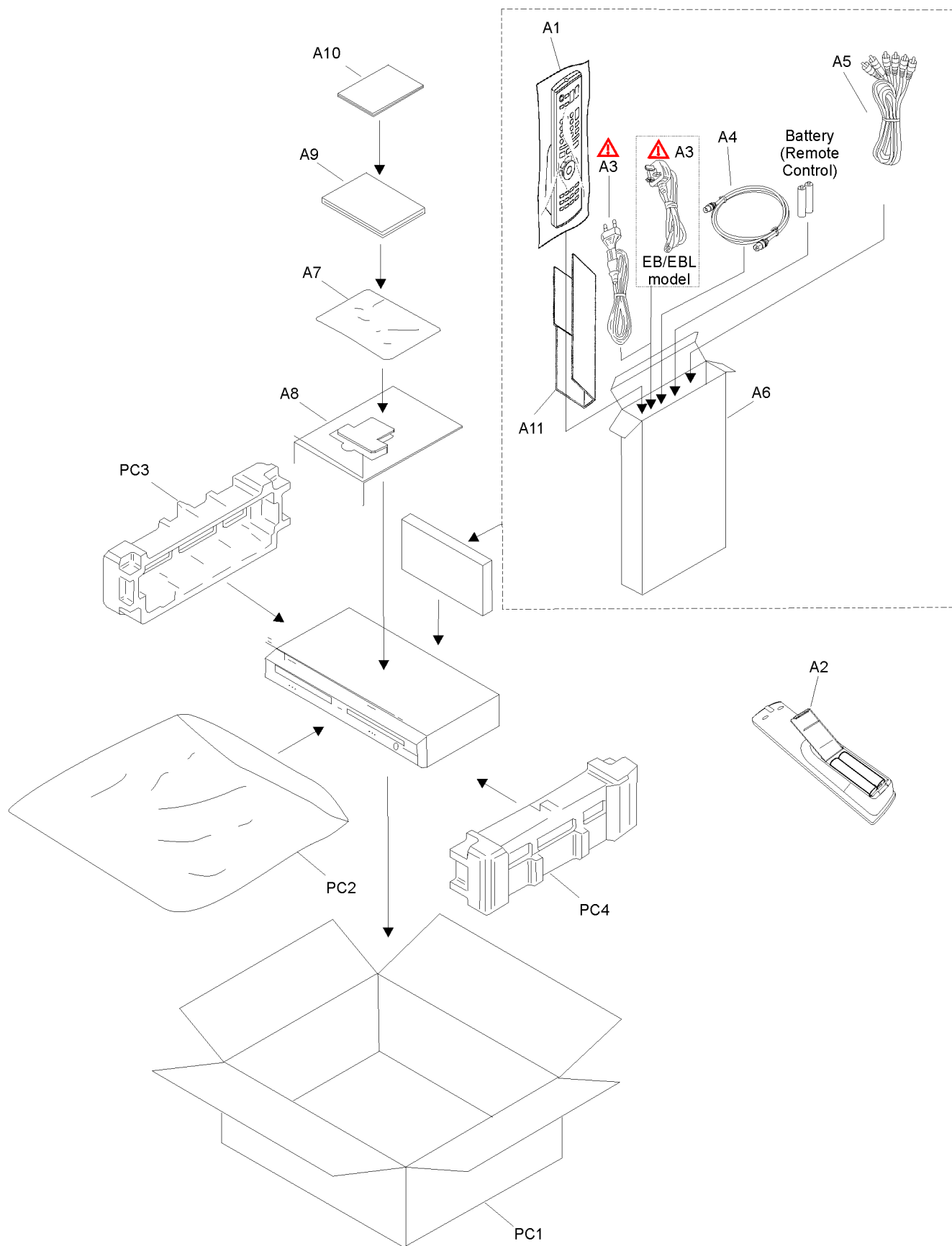
26.2. FRONT PANEL PARTS



26.3. VHS MECHANISM PARTS



26.4. PACKING & ACCESSORIES



27 REPLACEMENT PARTS LIST

NOTES:

*Important safety notice:

Components identified by \triangle mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufactures specified parts shown in the parts list.

*Warning: This product uses a laser diode.

Refer to caution statements.

*Capacity values are in microfarads (μ F) unless specified otherwise, P=Pico-farads (pF), F=Farads (F).

*Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000k (OHM).

*The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

*Printed Circuit Board's are identified by "■" character.

*All parts except parts mentioned [SPC] in the Remarks column are supplied from PAVCG.

*Parts mentioned [SPC] are supplied from PAVC.

No indication = all models

27.1. VHS MECHANISM PARTS

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|---------------|---------------------------|-----|---------|
| 1 | VEG1648-DT | RDD CYLINDER | 1 | |
| 2 | VEM0750 | CAPSTAN UNIT | 1 | |
| 3 | L1AZ00000004 | FE HEAD UNIT | 1 | |
| 4 | VDG1510 | INTERMEDIATE GEAR | 1 | |
| 5 | VDG1511-4 | MAIN CAM GEAR | 1 | |
| 6 | VDG1512 | IDLER GEAR | 1 | |
| 7 | VDG1512 | IDLER GEAR | 1 | |
| 8 | VDG1514-1 | CHANGE GEAR | 1 | |
| 9 | VDR0372 | REEL TABLE | 1 | |
| 10 | VDR0372 | REEL TABLE | 1 | |
| 11 | VDV0391-2 | CAPSTAN BELT | 1 | |
| 12 | VMB3550 | CHANGE GEAR SPRING | 1 | |
| 14 | VMD4252 | OPENER PIECE | 1 | |
| 15 | VMD4253 | LED PRISM | 1 | |
| 17 | VML3624-1 | MAIN LEVER | 1 | |
| 18 | VML3626-1 | PINCH CHARGE ARM | 1 | |
| 19 | VML3632 | IDLER ARM | 1 | |
| 20 | VMX3092 | P4 CAP | 1 | |
| 21 | VDB1431 | TENSION ARM BOSH | 1 | |
| 22 | VEM0796 | LOADING MOTOR UNIT | 1 | |
| 23 | VDG1637 | WORM GEAR | 1 | |
| 24 | VMD4987 | WORM BEARING | 1 | |
| 25 | VXA7105-2 | SUPPLY SHAFT HOLDER UNIT | 1 | |
| 26 | VXA7106-2 | TAKE UP SHAFT HOLDER UNIT | 1 | |
| 27 | L1AE000000036 | AC HEAD UNIT | 1 | |
| 28 | VXA7311 | SECTOR GEAR UNIT | 1 | |
| 29 | VXL3107 | SUPPLY LOADING ARM UNIT | 1 | |
| 30 | VXL3108 | TAKE UP LOADING ARM UNIT | 1 | |
| 31 | VXL3109-4 | PINCH ARM UNIT | 1 | |
| 32 | VXL3110 | P5 ARM UNIT | 1 | |
| 33 | VXL3111-1 | TENSION ARM UNIT | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|-----------|-------------------------|-----|---------|
| 34 | VMB3547-3 | TENSION SPRING | 1 | |
| 35 | VXL3112 | SUPPLY BRAKE ARM UNIT | 1 | |
| 36 | VXL3113 | TAKE UP BRAKE ARM UNIT | 1 | |
| 37 | VMB3548-2 | TAKE UP BRAKE SPRING | 1 | |
| 38 | VXL3124-2 | CHANGE LEVER UNIT | 1 | |
| 39 | VXP2133-1 | CENTRE CLUTCH UNIT | 1 | |
| 40 | VXP2168 | TORQUE CLUTCH UNIT | 1 | |
| 41 | VMD4983 | FPC HOLDER | 1 | |
| 50 | VMA0L25 | TOP PLATE | 1 | |
| 51 | VMD4255-4 | SIDE PLATE (L) | 1 | |
| 52 | VMD4254-4 | SIDE PLATE (R) UNIT | 1 | |
| 53 | VML3706-1 | OPENER LEVER | 1 | |
| 54 | VXA7110-3 | CASSETTE HOLDER UNIT | 1 | |
| 55 | VXL3160 | MAIN SHAFT UNIT | 1 | |
| B1 | VHD1044 | SCREW | 1 | |
| B2 | XSN3+35 | SCREW | 1 | |
| B3 | XTN26+7J | SCREW | 1 | |
| B4 | XTN26+7J | SCREW | 1 | |
| B5 | XTN26+7J | SCREW | 1 | |
| B6 | XTV26+5F | SCREW | 1 | |
| B7 | XTV26+5F | SCREW | 1 | |
| B8 | XTV26+8FR | SCREW | 1 | |
| B9 | XTV26+8FR | SCREW | 1 | |
| B10 | VHD1066 | SCREW | 1 | |
| B11 | VHD1066 | SCREW | 1 | |
| B12 | VHD1185 | SCREW | 1 | |
| B13 | VHD1095-1 | SCREW | 1 | |
| B14 | VHD1117-1 | SCREW | 1 | |
| B15 | VHD1117-1 | SCREW | 1 | |
| W1 | VMX2208 | WASHER | 1 | |
| W2 | VMX3196 | WASHER | 1 | |
| W3 | VMX2699 | WASHER | 1 | |
| W4 | VMX3196 | WASHER | 1 | |

27.2. MECHANISM & CASING PARTS

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|---------------|--------------|-------------------------|-----|--------------------|
| 1 | VXY1872 | RAM DRIVE UNIT | 1 | (RTL) (SPC) |
| █ 2 | VEP01977A | POWER PCB | 1 | (RTL) |
| 3 | RSC0770B | SHIELD CASE (B) | 1 | |
| 4 | VSC5586-1 | SHIELD CASE (T) | 1 | |
| 5 | RMZ0778 | P.BARRIER (B) | 1 | |
| 6 | RMZ0788 | P.BARRIER (C) | 1 | |
| █ 7 | VEP06F87D | MAIN PCB | 1 | DMR-EH80VEBS (RTL) |
| █ 7 | VEP06F87C | MAIN PCB | 1 | DMR-EH80VEGS (RTL) |
| █ 8 | VEP79108E | DIGITAL PCB | 1 | DMR-EH80VEGS (RTL) |
| █ 8 | RFBKBEH80VEB | DIGITAL PCB | 1 | DMR-EH80VEBS (RTL) |
| █ 9 | VEP09136G | DIGITAL INTERFACE PCB | 1 | (RTL) |
| █ 10 | VEP001J9B | SD DV PCB | 1 | (RTL) |
| 11 | RMA1908-1 | FRONT ANGLE | 1 | |
| 12 | RMA1917-1 | HDD BRACKET | 1 | |
| 13 | K1MZ40Z00002 | CONNECTOR | 1 | |
| 14 | RFBK0052HDK | HARD DISC DRIVE | 1 | |
| 15 | VEE1A65 | HDD CABLE | 1 | |
| 16 | VWJ1777 | HDD-DIGITAL PCB FFC | 1 | |
| 17 | RMA1905 | DVD ANGLE | 1 | |
| 18 | VEE1A64 | DRIVE MAIN CABLE | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|---------------|--------------|-------------------------|-----|-------------------|
| 19 | VWJ1779 | FFC 40P | 1 | |
| 20 | VEE1B77 | SD-DIGITAL PCB FFC | 1 | |
| 21 | VWJ1727 | CYL FFC | 1 | |
| 22 | VWJ1728 | A/C HEAD FFC | 1 | |
| 23 | VEE0Z83 | POWER WIRE | 1 | |
| 24 | K2KA29A00013 | COAX CABLE | 2 | |
| 25 | VMX3399 | MECHA SPACER(R) | 1 | |
| 26 | VMX3398 | MECHA SPACER(F) | 1 | |
| 27 | RMG0677-K | DAMPER | 4 | |
| 28 | VKC0412 | MINI CLAMPER | 1 | |
| 29 | VHD1662 | SCREW | 4 | |
| 30 | JOKE00000067 | FILTER | 1 | |
| 31 | RKA0178-X | LEG | 2 | |
| 32 | VKA0382 | LEG CUSHION | 2 | |
| 33 | RMC0622 | EARTH SPRING (DI) | 1 | |
| 34 | RMC0632 | EARTH SPRING (T) | 1 | |
| 35 | RMA1897 | CENTER ANGLE | 1 | |
| 36 | RGR0357B-B | REAR PANEL | 1 | △ DMR-EH80VEBS |
| 36 | RGR0357B-A | REAR PANEL | 1 | △ DMR-EH80VEGS |
| 37 | L6FAHCBE0001 | FAN POWER | 1 | |
| 38 | L6FAKCCE0007 | FAN HDD | 1 | |
| 39 | RMN0817A | FAN COVER | 1 | |
| 40 | RKM0537-S | TOP PANEL | 1 | |
| 41 | VKC0554 | PCB SUPPORT | 1 | |
| 42 | VKC0295 | MINI CARD SPACER | 1 | |
| 43 | VKC0612 | PCB SPACER | 1 | |
| 44 | RHD32001 | SCREW WITH WASHER | 4 | |
| 45 | XSN3+4FJK | SCREW (TUNER) | 1 | |
| 46 | RHD30111-3 | SCREW | 16 | |
| 47 | VEE1A66 | DV-DIGITAL CABLE U | 1 | |
| 48 | VHD0690-1 | SCREW | 19 | |
| 49 | VHD1452-2 | SCREW | 1 | |
| 50 | VHD1453-3 | SCREW | 3 | |
| 51 | RHD30115-3 | SCREW | 3 | |
| 52 | VHD1092-1 | SCREW | 1 | |
| 53 | XTV26+6FFJ | SCREW | 1 | |
| 54 | RHD30113 | SCREW | 4 | |
| 55 | XYN3+J8FJ | SCREW | 2 | |
| █ 56 | VEP04885C-L | FRONT JACK PCB | 1 | (RTL) |
| █ 57 | VEP07A78F | FL DRIVE PCB | 1 | (RTL) |
| 58 | RHD26045 | SCREW | 8 | |
| 59 | RYP1278L-S | FRONT PANEL | 1 | DMR-EH80VEBS |
| 59 | RYP1278F-S | FRONT PANEL | 1 | DMR-EH80VEGS |
| 59-1 | RYF0762C-S | DOOR ASS'Y | 1 | |
| 59-2 | RKF0722C-S | BLINDER PANEL | 1 | |
| 59-3 | RKF0723A-S | TRAY DOOR | 1 | |
| 59-4 | REKD0039 | SD SLOT UNIT | 1 | |

27.3. PRINTED CIRCUIT BOARDS INCLUDED IN MAIN PCB

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|------------|-------------------------|-----|--------------------|
| TU7401 | ENG37A08GF | TUNER | 1 | DMR-EH80VEBS (RTL) |
| TU7401 | ENG37A07GF | TUNER | 1 | DMR-EH80VEGS (RTL) |
| TU7402 | ENG37A08GF | TUNER | 1 | DMR-EH80VEBS (RTL) |
| TU7402 | ENG37A14GF | TUNER | 1 | DMR-EH80VEGS (RTL) |
| TU7403 | ENC879T3F | RF MODULATOR | 1 | (RTL) |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|-------------|-----------|-------------------------|-----|--------------------|
| ■ DE7401 | VEP07A51B | DECODER PCB | 1 | DMR-EH80VEBS (RTL) |
| ■ DE7401 | VEP07A51F | DECODER PCB | 1 | DMR-EH80VEGS (RTL) |
| ■ DE7402 | VEP07A51A | DECODER PCB | 1 | DMR-EH80VEBS (RTL) |
| ■ DE7402 | VEP07A51F | DECODER PCB | 1 | DMR-EH80VEGS (RTL) |

27.4. PACKING & ACCESSORIES PARTS

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|-------------------|
| A1 | EUR7729KN0 | REMOTE CONTROL | 1 | DMR-EH80VEBS |
| A1 | EUR7729KM0 | REMOTE CONTROL | 1 | DMR-EH80VEGS |
| A2 | UR77EC2903 | BATTERY COVER | 1 | |
| A3 | RJA0044-3C | POWER CORD | 1 | △ DMR-EH80VEBS |
| A3 | RJA0043-1C | POWERCORD | 1 | △ DMR-EH80VEGS |
| A4 | K1TWACC00001 | RF CABLE | 1 | |
| A5 | K2KA6BA00003 | AV CORD | 1 | |
| A6 | RPQFD0007 | ACCESSORY BOX | 1 | |
| A7 | RPFD0003 | PAPER BAG | 1 | DMR-EH80VEBS |
| A7 | RPFD0001 | PE-BAG | 1 | DMR-EH80VEGS |
| A8 | RPQD0005 | CORRUGATED PAD | 1 | DMR-EH80VEGS |
| A9 | RQTD0179-B | O/I BOOK ENG UK | 1 | DMR-EH80VEBS |
| A9 | RQTD0180-D | O/I BOOK GER | 1 | DMR-EH80VEGS |
| A9 | RQTD0181-V | O/I BOOK ITA | 1 | DMR-EH80VEGS |
| A9 | RQTD0182-H | O/I BOOK DUT | 1 | DMR-EH80VEGS |
| A9 | RQTD0184-A | O/I BOOK ENG CONT | 1 | DMR-EH80VEGS |
| A9 | RQTD0183-C | O/I BOOK FRE PAL | 1 | DMR-EH80VEGS |
| A9 | RQTD0185-M | O/I BOOK SPA | 1 | DMR-EH80VEGS |
| A9 | RQTD0186-Z | O/I BOOK SWE | 1 | DMR-EH80VEGS |
| A9 | RQTD0187-J | O/I BOOK DAN | 1 | DMR-EH80VEGS |
| A10 | RQCA1405-1 | EPG CAUTION SHEET | 1 | DMR-EH80VEGS |
| A10 | RQCAD0024 | QUICK START GUIDE | 1 | DMR-EH80VEBS |
| A10 | RQCC2704 | DVD-MEDIA LEAFLET | 1 | |
| A10 | RQCA1395 | CARD CAUTION SHEET | 1 | |
| A11 | RPQ1594 | PAD | 1 | |
| PC1 | RPQ7619 | PACKING CASE | 1 | DMR-EH80VEBS |
| PC1 | RPQ7618 | PACKING CASE | 1 | DMR-EH80VEGS |
| PC2 | RPFD0006 | MIRAMAT BAG | 1 | |
| PC3 | RPN1819A | CUSHION(LEFT) | 1 | |
| PC4 | RPN1819B | CUSHION(RIGHT) | 1 | |

27.5. ELECTRICAL PARTS

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|---------|
| C11102 | ECKMNA222MEV | CERAMIC CAPACITOR | 1 | △ |
| C11103 | F2B2G680A050 | ALU ELEC CAPACITOR | 1 | |
| C11105 | ECQU2A223MLC | EMI CAPACITOR | 1 | △ |
| C11106 | F1B2G4710001 | CERAMIC CAPACITOR | 1 | △ |
| C11107 | F1B2G4710001 | CERAMIC CAPACITOR | 1 | |
| C11108 | F1B3A3320011 | CERAMIC CAPACITOR | 1 | |
| C11110 | ECQU2A683MLC | X2 CAPACITOR | 1 | △ |
| C11201 | F1B3D271A011 | CERAMIC CAPACITOR | 1 | |
| C11202 | ECJ2VB1H102K | CHIP CAPACITOR | 1 | |
| C11203 | ECJ2VC1H470J | CHIP CAPACITOR | 1 | |
| C11204 | F2A1V5600013 | ALU ELEC CAPACITOR | 1 | |
| C11205 | F1J1H222A532 | CHIP CAPACITOR | 1 | |
| C11302 | ECJ2VB1E823K | CHIP CAPACITOR | 1 | |
| C11303 | ECJ2VB1E473K | CHIP CAPACITOR | 1 | |
| C11401 | EEUFM1V221B | ALU ELEC CAPACITOR | 1 | |
| C11402 | F2A1V5600013 | ALU ELEC CAPACITOR | 1 | |
| C11403 | F2A1C152A619 | ALU ELEC CAPACITOR | 1 | |
| C11404 | F2A1C152A619 | ALU ELEC CAPACITOR | 1 | |
| C11405 | EEUFM1C471B | ALU ELEC CAPACITOR | 1 | |
| C11406 | F1J2A332A023 | CHIP CAPACITOR | 1 | |
| C11407 | F1J2A332A023 | CHIP CAPACITOR | 1 | |
| C11501 | EEUFM1E221B | ALU ELEC CAPACITOR | 1 | |
| C11502 | F1J1H1040007 | CHIP CAPACITOR | 1 | |
| C11503 | F1J1H1040007 | CHIP CAPACITOR | 1 | |
| C11504 | F1J1E104A081 | CHIP CAPACITOR | 1 | |
| C11505 | ECJ2VC1H181J | CHIP CAPACITOR | 1 | |
| C11506 | ECJ2VB1H103K | CHIP CAPACITOR | 1 | |
| C11507 | F2A1A2210063 | ALU ELEC CAPACITOR | 1 | |
| C11509 | F1J1E104A081 | CHIP CAPACITOR | 1 | |
| C12001 | ECEA1CKA220B | ALU ELEC CAPACITOR | 1 | |
| C15001 | EEUFM1C121B | ALU ELEC CAPACITOR | 1 | |
| C15004 | ECJ2VF1H103Z | CHIP CAPACITOR | 1 | |
| C15005 | F2A1A4710038 | ALU ELEC CAPACITOR | 1 | |
| C15006 | F1J0J106A014 | CHIP CAPACITOR | 1 | |
| C15007 | F1K1C106A062 | CHIP CAPACITOR | 1 | |
| C15008 | EEUFM1E221B | ALU ELEC CAPACITOR | 1 | |
| C15009 | F1J1C1050030 | CHIP CAPACITOR | 1 | |
| C15010 | ECJ2VF1H103Z | CHIP CAPACITOR | 1 | |
| C15011 | ECJ2VB1H391K | CHIP CAPACITOR | 1 | |
| C15012 | ECJ2VB1H472K | CHIP CAPACITOR | 1 | |
| C15013 | ECJ2VB1H102K | CHIP CAPACITOR | 1 | |
| C15015 | F2A1A681A540 | ALU ELEC CAPACITOR | 1 | |
| C15017 | EEUFM1E221B | ALU ELEC CAPACITOR | 1 | |
| C15018 | F1J1H1040007 | CHIP CAPACITOR | 1 | |
| C15019 | F1J1H1040007 | CHIP CAPACITOR | 1 | |
| C15020 | F1J1H2230005 | CHIP CAPACITOR | 1 | |
| C15021 | ECJ2VC1H181J | CHIP CAPACITOR | 1 | |
| C15022 | ECJ2VB1H103K | CHIP CAPACITOR | 1 | |
| C15024 | F2A1A4710038 | ALU ELEC CAPACITOR | 1 | |
| C15025 | EEUFM1E221B | ALU ELEC CAPACITOR | 1 | |
| C15026 | F1J1H1040007 | CHIP CAPACITOR | 1 | |
| C15027 | F1J1H1040007 | CHIP CAPACITOR | 1 | |
| C15028 | ECJ2VB1E473K | CHIP CAPACITOR | 1 | |
| C15029 | ECJ2VC1H270J | CHIP CAPACITOR | 1 | |
| C15030 | F1J1C334A091 | CHIP CAPACITOR | 1 | |
| C15032 | F2A1A681A540 | ALU ELEC CAPACITOR | 1 | |
| C15033 | F1J1C105A091 | CHIP CAPACITOR | 1 | |
| C2001 | F1H1H330A736 | CHIP CAPACITOR | 1 | |
| C2003 | F1H1A1050029 | CHIP CAPACITOR | 1 | |
| C2051 | ECEA0JKN220B | ALU ELEC CAPACITOR | 1 | |
| C2053 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C2054 | ECJ1VB1H392K | CHIP CAPACITOR | 1 | |
| C2055 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C2099 | ECJ1VC1H681J | CHIP CAPACITOR | 1 | |
| C2501 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C2502 | ECEA0JKA221B | ALU ELEC CAPACITOR | 1 | |
| C2504 | F1H1E223A029 | CHIP CAPACITOR | 1 | |
| C2505 | F1H1E223A029 | CHIP CAPACITOR | 1 | |
| C2506 | F1H1A2240004 | CHIP CAPACITOR | 1 | |
| C2507 | F1H1H1020005 | CHIP CAPACITOR | 1 | |
| C2508 | F1H1H182A219 | CHIP CAPACITOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|---------|
| C2509 | ECEA1CKA220B | ALU ELEC CAPACITOR | 1 | |
| C2510 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C2511 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C2512 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C2513 | F1H1A1050029 | CHIP CAPACITOR | 1 | |
| C2515 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C2518 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C2519 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C2551 | ECJ1VB1C563K | CHIP CAPACITOR | 1 | |
| C2552 | ECJ1VB1C563K | CHIP CAPACITOR | 1 | |
| C2561 | ECJ1VB1C563K | CHIP CAPACITOR | 1 | |
| C2562 | ECJ1VB1C563K | CHIP CAPACITOR | 1 | |
| C2571 | ECA1VM221B | ALU ELEC CAPACITOR | 1 | |
| C3001 | F1H1H1510001 | CHIP CAPACITOR | 1 | |
| C3003 | F1H0J1050012 | CHIP CAPACITOR | 1 | |
| C3004 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C3005 | F1H1H2700003 | CHIP CAPACITOR | 1 | |
| C3006 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C3007 | F1H0J1050012 | CHIP CAPACITOR | 1 | |
| C3008 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C3009 | ECEA1HKA4R7B | ALU ELEC CAPACITOR | 1 | |
| C3010 | F1H0J1050012 | CHIP CAPACITOR | 1 | |
| C3011 | F1H0J1050012 | CHIP CAPACITOR | 1 | |
| C3012 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C3013 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C3015 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C3016 | F1H1H4700004 | CHIP CAPACITOR | 1 | |
| C3017 | F1H0J1050012 | CHIP CAPACITOR | 1 | |
| C3018 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C3019 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C3020 | ECJ1VC1H331J | CHIP CAPACITOR | 1 | |
| C3021 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C3023 | ECEA1HKA3R3B | ALU ELEC CAPACITOR | 1 | |
| C3024 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C3026 | F1H0J1050012 | CHIP CAPACITOR | 1 | |
| C3027 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C3028 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C3029 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C3030 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C3033 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C3034 | ECEA1HKA010B | ALU ELEC CAPACITOR | 1 | |
| C3035 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C3036 | ECEA1HKA4R7B | ALU ELEC CAPACITOR | 1 | |
| C3037 | ECEA1HKAR47B | ALU ELEC CAPACITOR | 1 | |
| C3038 | F1H1E223A029 | CHIP CAPACITOR | 1 | |
| C3039 | F1H1C333A041 | CHIP CAPACITOR | 1 | |
| C3040 | ECEA1HKA2R2B | ALU ELEC CAPACITOR | 1 | |
| C3041 | F1H1E223A029 | CHIP CAPACITOR | 1 | |
| C3042 | ECJ2YB0J335K | CHIP CAPACITOR | 1 | |
| C3043 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C3044 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C3045 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C3046 | ECJ1VC1H030C | CHIP CAPACITOR | 1 | |
| C3047 | ECEA1HKA010B | ALU ELEC CAPACITOR | 1 | |
| C3048 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C3049 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C3050 | F1H1A1050029 | CHIP CAPACITOR | 1 | |
| C3051 | ECJ1VB1A105K | CHIP CAPACITOR | 1 | |
| C3052 | F1H0J1050012 | CHIP CAPACITOR | 1 | |
| C3053 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C3054 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C3055 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C3056 | ECJ1VC1H100D | CHIP CAPACITOR | 1 | |
| C3080 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C31507 | F2A1A2210063 | ALU ELEC CAPACITOR | 1 | |
| C31511 | ECJ1VB1A105K | CHIP CAPACITOR | 1 | |
| C31512 | F1J0J106A014 | CHIP CAPACITOR | 1 | |
| C31535 | ECJ1VB1A105K | CHIP CAPACITOR | 1 | |
| C31536 | F1J0J106A014 | CHIP CAPACITOR | 1 | |
| C31901 | ECJ1VC1H102J | CHIP CAPACITOR | 1 | |
| C33501 | F1J0J475A008 | CHIP CAPACITOR | 1 | |
| C33502 | F1H1H1010005 | CHIP CAPACITOR | 1 | |
| C33503 | F1J0J475A008 | CHIP CAPACITOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|---------|
| C33504 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C33505 | ECEA0JKA101B | ALU ELEC CAPACITOR | 1 | |
| C33506 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C33507 | FLH1C104A008 | CHIP CAPACITOR | 1 | |
| C33738 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| C3501 | FLJ0J475A002 | CHIP CAPACITOR | 1 | |
| C3502 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3503 | FLJ0J475A002 | CHIP CAPACITOR | 1 | |
| C3504 | FLH1H271A832 | CHIP CAPACITOR | 1 | |
| C3505 | FLJ0J475A002 | CHIP CAPACITOR | 1 | |
| C3506 | FLJ0J475A002 | CHIP CAPACITOR | 1 | |
| C3507 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C3508 | FLH1C104A008 | CHIP CAPACITOR | 1 | |
| C3509 | FLJ0J475A002 | CHIP CAPACITOR | 1 | |
| C3510 | FLH1H8200004 | CHIP CAPACITOR | 1 | |
| C3511 | FLH1H271A832 | CHIP CAPACITOR | 1 | |
| C3512 | FLH1H271A832 | CHIP CAPACITOR | 1 | |
| C3513 | FLH1H221A832 | CHIP CAPACITOR | 1 | |
| C3514 | FLJ0J475A002 | CHIP CAPACITOR | 1 | |
| C3515 | ECJ1VC1H220J | CHIP CAPACITOR | 1 | |
| C3516 | ECJ1VC1H560J | CHIP CAPACITOR | 1 | |
| C3517 | ECJ1VC1H560J | CHIP CAPACITOR | 1 | |
| C3518 | ECJ1VC1H220J | CHIP CAPACITOR | 1 | |
| C35017 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C35018 | FLH0J1050012 | CHIP CAPACITOR | 1 | |
| C35019 | FLH0J1050012 | CHIP CAPACITOR | 1 | |
| C35020 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C35021 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C35022 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C35023 | ECEA1CKA220B | ALU ELEC CAPACITOR | 1 | |
| C35024 | FLH0J1050012 | CHIP CAPACITOR | 1 | |
| C35025 | FLH0J1050012 | CHIP CAPACITOR | 1 | |
| C35026 | FLH0J1050012 | CHIP CAPACITOR | 1 | |
| C35027 | FLH0J1050012 | CHIP CAPACITOR | 1 | |
| C35028 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C35029 | F2A0J102A016 | ALU ELEC CAPACITOR | 1 | |
| C35030 | F2A0J102A016 | ALU ELEC CAPACITOR | 1 | |
| C35031 | F2A0J102A016 | ALU ELEC CAPACITOR | 1 | |
| C35032 | F2A0J471A016 | ALU ELEC CAPACITOR | 1 | |
| C35033 | F2A0J471A016 | ALU ELEC CAPACITOR | 1 | |
| C37001 | FLH1C104A008 | CHIP CAPACITOR | 1 | |
| C37002 | FLH1C104A008 | CHIP CAPACITOR | 1 | |
| C37003 | ECEA1CKS100B | ALU ELEC CAPACITOR | 1 | |
| C37104 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C37105 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C37106 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C37107 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C37502 | ECJ1VC1H100D | CHIP CAPACITOR | 1 | |
| C37503 | F4D55473A013 | ALU ELEC CAPACITOR | 1 | |
| C37504 | FLH1C104A008 | CHIP CAPACITOR | 1 | |
| C37506 | ECJ1VC1H100D | CHIP CAPACITOR | 1 | |
| C37507 | FLH0J1050012 | CHIP CAPACITOR | 1 | |
| C37508 | FLH1H1030007 | CHIP CAPACITOR | 1 | |
| C37546 | FLH1C104A008 | CHIP CAPACITOR | 1 | |
| C37579 | ECJ1VC1H100D | CHIP CAPACITOR | 1 | |
| C37580 | ECJ1VC1H100D | CHIP CAPACITOR | 1 | |
| C37581 | ECJ1VC1H100D | CHIP CAPACITOR | 1 | |
| C37582 | ECJ1VC1H100D | CHIP CAPACITOR | 1 | |
| C37583 | FLH1H1010005 | CHIP CAPACITOR | 1 | |
| C37584 | FLH1H2700003 | CHIP CAPACITOR | 1 | |
| C37585 | FLH1H2700003 | CHIP CAPACITOR | 1 | |
| C37586 | ECJ1VC1H180J | CHIP CAPACITOR | 1 | |
| C37587 | ECJ1VC1H180J | CHIP CAPACITOR | 1 | |
| C37588 | FLH1H1030007 | CHIP CAPACITOR | 1 | |
| C37589 | FLH1C104A008 | CHIP CAPACITOR | 1 | |
| C37592 | ECJ1VC1H100D | CHIP CAPACITOR | 1 | |
| C37593 | ECJ1VC1H100D | CHIP CAPACITOR | 1 | |
| C37595 | FLH1C104A008 | CHIP CAPACITOR | 1 | |
| C37596 | FLH1H4700004 | CHIP CAPACITOR | 1 | |
| C37597 | FLH1H1030007 | CHIP CAPACITOR | 1 | |
| C37598 | FLH1H4700004 | CHIP CAPACITOR | 1 | |
| C37599 | FLH1C104A008 | CHIP CAPACITOR | 1 | |
| C37600 | FLH1H4700004 | CHIP CAPACITOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|---------|
| C37601 | FLH1C104A008 | CHIP CAPACITOR | 1 | |
| C37602 | FLH1H1030007 | CHIP CAPACITOR | 1 | |
| C37603 | FLH1H1030007 | CHIP CAPACITOR | 1 | |
| C37604 | FLH1C104A008 | CHIP CAPACITOR | 1 | |
| C37607 | FLH1C104A008 | CHIP CAPACITOR | 1 | |
| C37609 | FLH1H1030007 | CHIP CAPACITOR | 1 | |
| C37610 | FLH1H1030007 | CHIP CAPACITOR | 1 | |
| C37618 | FLH1H1030007 | CHIP CAPACITOR | 1 | |
| C37620 | FLH1H1030007 | CHIP CAPACITOR | 1 | |
| C37626 | FLH1H1030007 | CHIP CAPACITOR | 1 | |
| C37633 | ECEA0JKA101B | ALU ELEC CAPACITOR | 1 | |
| C37636 | FLH1A1050029 | CHIP CAPACITOR | 1 | |
| C37652 | FLH1A1050029 | CHIP CAPACITOR | 1 | |
| C3801 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| C3802 | FLH1C104A008 | CHIP CAPACITOR | 1 | |
| C3901 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C3904 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C3905 | FLH0J1050012 | CHIP CAPACITOR | 1 | |
| C3906 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3907 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3908 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3909 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3910 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C3911 | ECEA0JKA221B | ALU ELEC CAPACITOR | 1 | |
| C3912 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3913 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C3914 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C3915 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3916 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3920 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C3921 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3922 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C3923 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C3924 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3925 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3926 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3927 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C3928 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3929 | ECEA0JKA221B | ALU ELEC CAPACITOR | 1 | |
| C3930 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C3931 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3932 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C3933 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3934 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3935 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3936 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3937 | ECJ1VB1A105K | CHIP CAPACITOR | 1 | |
| C3938 | FLH0J1050012 | CHIP CAPACITOR | 1 | |
| C3939 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3943 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3945 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3946 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3947 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3948 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3952 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C3953 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C39001 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C39002 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C39003 | FLH1H1030006 | CHIP CAPACITOR | 1 | |
| C39010 | FLH1C104A042 | CHIP CAPACITOR | 1 | |
| C4001 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C4002 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C4004 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C4005 | ECEA0JKA101B | ALU ELEC CAPACITOR | 1 | |
| C4007 | FLH1H222A219 | CHIP CAPACITOR | 1 | |
| C4008 | FLH1H182A219 | CHIP CAPACITOR | 1 | |
| C4009 | ECEA0JKA220B | ALU ELEC CAPACITOR | 1 | |
| C4010 | ECEA1EKA4R7B | ALU ELEC CAPACITOR | 1 | |
| C4014 | ECEA1HKA4R7B | ALU ELEC CAPACITOR | 1 | |
| C4015 | FLH1H682A219 | CHIP CAPACITOR | 1 | |
| C4016 | ECEA0JKA220B | ALU ELEC CAPACITOR | 1 | |
| C4017 | ECEA1HKA3R3B | ALU ELEC CAPACITOR | 1 | |
| C4018 | FLH1H182A219 | CHIP CAPACITOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|--------------|
| C4020 | ECQB1H223JF3 | PLAST FILM CAPACITOR | 1 | |
| C4021 | ECJ1VC1H221J | CHIP CAPACITOR | 1 | |
| C4022 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C4023 | F1H1E223A029 | CHIP CAPACITOR | 1 | |
| C4024 | ECJ1VB1H152K | CHIP CAPACITOR | 1 | |
| C4025 | ECJ2VF1H103Z | CHIP CAPACITOR | 1 | |
| C4101 | ECJ1VC1H471J | CHIP CAPACITOR | 1 | |
| C4102 | ECJ1VC1H471J | CHIP CAPACITOR | 1 | |
| C4105 | F1H1H1010005 | CHIP CAPACITOR | 1 | |
| C4106 | F1H1H1010005 | CHIP CAPACITOR | 1 | |
| C4107 | ECJ1VC1H471J | CHIP CAPACITOR | 1 | |
| C4108 | ECJ1VC1H471J | CHIP CAPACITOR | 1 | |
| C4111 | F1H1H1010005 | CHIP CAPACITOR | 1 | |
| C4112 | F1H1H1010005 | CHIP CAPACITOR | 1 | |
| C4303 | F1H1H1010005 | CHIP CAPACITOR | 1 | |
| C4304 | F1H1H1010005 | CHIP CAPACITOR | 1 | |
| C4305 | F1H1H1020005 | CHIP CAPACITOR | 1 | |
| C4306 | F1H1H1020005 | CHIP CAPACITOR | 1 | |
| C4501 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C4502 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C4503 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C4504 | ECQB1H473JF3 | PLAST FILM CAPACITOR | 1 | |
| C4505 | ECEA0JKA330B | ALU ELEC CAPACITOR | 1 | |
| C4506 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C4508 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C4509 | ECEA0JKA220B | ALU ELEC CAPACITOR | 1 | |
| C4510 | ECQB1H153JF3 | PLAST FILM CAPACITOR | 1 | |
| C4511 | F1H1C333A041 | CHIP CAPACITOR | 1 | |
| C4512 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C4513 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C4515 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C4516 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C4518 | F1H1A2240004 | CHIP CAPACITOR | 1 | |
| C4519 | ECQB1H153JF3 | PLAST FILM CAPACITOR | 1 | |
| C4520 | ECEA0JKA220B | ALU ELEC CAPACITOR | 1 | |
| C4521 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C4522 | ECEA0JKA330B | ALU ELEC CAPACITOR | 1 | |
| C4523 | ECQB1H473JF3 | PLAST FILM CAPACITOR | 1 | |
| C4524 | ECEA0JKA101B | ALU ELEC CAPACITOR | 1 | |
| C4526 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C4531 | ECEA1CKA470B | ALU ELEC CAPACITOR | 1 | |
| C4533 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C4534 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C4544 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C4545 | ECEA0JKA220B | ALU ELEC CAPACITOR | 1 | |
| C45001 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C45003 | ECQV1H104JL3 | PLAST FILM CAPACITOR | 1 | |
| C45004 | F2A1C471A628 | ALU ELEC CAPACITOR | 1 | |
| C45005 | F2A0J101A592 | ALU ELEC CAPACITOR | 1 | |
| C45006 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C45007 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C45008 | F2A1C101A699 | ALU ELEC CAPACITOR | 1 | |
| C45010 | F2A1C470A637 | ALU ELEC CAPACITOR | 1 | |
| C45012 | F2A1C470A637 | ALU ELEC CAPACITOR | 1 | |
| C45013 | ECQB1H473JF3 | PLAST FILM CAPACITOR | 1 | |
| C45014 | F2A1H4R7A638 | ALU ELEC CAPACITOR | 1 | |
| C45015 | F1H1H1020005 | CHIP CAPACITOR | 1 | |
| C45016 | F1H1H1020005 | CHIP CAPACITOR | 1 | |
| C45019 | F1H1H1020005 | CHIP CAPACITOR | 1 | |
| C45020 | F1H1H1020005 | CHIP CAPACITOR | 1 | |
| C4915 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C4916 | F2A0J470A599 | ALU ELEC CAPACITOR | 1 | |
| C4917 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C4918 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C4919 | F2A1V100A534 | ALU ELEC CAPACITOR | 1 | |
| C4920 | F2A1V100A534 | ALU ELEC CAPACITOR | 1 | |
| C4921 | ECEA0JKA220B | ALU ELEC CAPACITOR | 1 | DMR-EH80VEBS |
| C4922 | F2A1V100A534 | ALU ELEC CAPACITOR | 1 | |
| C4923 | F2A1V100A534 | ALU ELEC CAPACITOR | 1 | |
| C4924 | F2A1V100A534 | ALU ELEC CAPACITOR | 1 | |
| C4925 | F2A1V100A534 | ALU ELEC CAPACITOR | 1 | |
| C4926 | F1H0J1050012 | CHIP CAPACITOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|--------------|
| C4927 | F2A1E1010067 | ALU ELEC CAPACITOR | 1 | |
| C4928 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4929 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4930 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4931 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4932 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4933 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4934 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4935 | F2A1E1010067 | ALU ELEC CAPACITOR | 1 | |
| C4936 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4937 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4938 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4939 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4940 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4941 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4942 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C4943 | F2A1H1R0A236 | ALU ELEC CAPACITOR | 1 | |
| C4944 | F2A1C470A637 | ALU ELEC CAPACITOR | 1 | |
| C4945 | F2A1C221A637 | ALU ELEC CAPACITOR | 1 | |
| C4949 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | DMR-EH80VEBS |
| C5001 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C5002 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C5003 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C5004 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C5005 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C5006 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C5007 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C6001 | ECJ1VC1H180J | CHIP CAPACITOR | 1 | |
| C6002 | ECJ1VC1H220J | CHIP CAPACITOR | 1 | |
| C6003 | DOYBR0000020 | CHIP RESISTOR | 1 | |
| C6005 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C6006 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C6007 | ECJ1VC1H220J | CHIP CAPACITOR | 1 | |
| C6008 | ECJ1VC1H471J | CHIP CAPACITOR | 1 | |
| C6009 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C6010 | ECJ1VC1H220J | CHIP CAPACITOR | 1 | |
| C6012 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C6014 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C6015 | F1H1C333A041 | CHIP CAPACITOR | 1 | |
| C6016 | F1H1H1020005 | CHIP CAPACITOR | 1 | |
| C6020 | F1J1H1040007 | CHIP CAPACITOR | 1 | |
| C6101 | ECEA0JKA221B | ALU ELEC CAPACITOR | 1 | |
| C6102 | F1H1A1050029 | CHIP CAPACITOR | 1 | |
| C6103 | F1H0J1050012 | CHIP CAPACITOR | 1 | |
| C6104 | F2A0J471A016 | ALU ELEC CAPACITOR | 1 | |
| C6105 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C6106 | ECEA1HKA4R7B | ALU ELEC CAPACITOR | 1 | |
| C6107 | ECJ1VB1C563K | CHIP CAPACITOR | 1 | |
| C6108 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C6109 | F1H1A1050029 | CHIP CAPACITOR | 1 | |
| C6110 | F1H1A1050029 | CHIP CAPACITOR | 1 | |
| C6111 | ECJ1VC1H561J | CHIP CAPACITOR | 1 | |
| C6114 | F1H1H330A736 | CHIP CAPACITOR | 1 | DMR-EH80VEGS |
| C6115 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C6116 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C6121 | F1H1H330A736 | CHIP CAPACITOR | 1 | |
| C6302 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C6303 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C6308 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C6401 | ECJ1VC1H221J | CHIP CAPACITOR | 1 | |
| C6402 | ECJ1VC1H221J | CHIP CAPACITOR | 1 | |
| C66801 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C7301 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C7302 | DOYBR0000020 | CHIP RESISTOR | 1 | |
| C7303 | ECEA0JKA101B | ALU ELEC CAPACITOR | 1 | |
| C7305 | ECEA0JKA101B | ALU ELEC CAPACITOR | 1 | |
| C7306 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C7307 | ECJ1VC1H100D | CHIP CAPACITOR | 1 | |
| C7308 | ECJ1VC1H100D | CHIP CAPACITOR | 1 | |
| C7309 | F1H1H1010005 | CHIP CAPACITOR | 1 | DMR-EH80VEBS |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|--------------|
| C7310 | F1H1H1010005 | CHIP CAPACITOR | 1 | DMR-EH80VEBS |
| C7311 | F1H1H1010005 | CHIP CAPACITOR | 1 | |
| C7312 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C7313 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C7314 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C7317 | ECEA1CKA470B | ALU ELEC CAPACITOR | 1 | |
| C7318 | ECEA1CKA100B | ALU ELEC CAPACITOR | 1 | |
| C7323 | ECJ1VC1H102J | CHIP CAPACITOR | 1 | |
| C7323 | F1H1H1020005 | CHIP CAPACITOR | 1 | DMR-EH80VEBS |
| C7324 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C7329 | DOYBR0000020 | CHIP RESISTOR | 1 | |
| C7330 | DOGB822JA057 | CHIP RESISTOR | 1 | |
| C7332 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C7333 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C7334 | ECEA1HKA2R2B | ALU ELEC CAPACITOR | 1 | |
| C7335 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C7401 | F1H0J1050012 | CHIP CAPACITOR | 1 | |
| C7402 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C7403 | FLJ1A105A003 | CHIP CAPACITOR | 1 | |
| C7404 | F1H0J1050012 | CHIP CAPACITOR | 1 | |
| C7405 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C7406 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C7407 | FLJ1A105A003 | CHIP CAPACITOR | 1 | |
| C7411 | ECEA1HKA2R2B | ALU ELEC CAPACITOR | 1 | DMR-EH80VEBS |
| C7412 | F1H1H330A736 | CHIP CAPACITOR | 1 | |
| C7413 | F1H1H330A736 | CHIP CAPACITOR | 1 | |
| C7414 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C7415 | ECEA1HKA010B | ALU ELEC CAPACITOR | 1 | |
| C7417 | ECEA0JKA101B | ALU ELEC CAPACITOR | 1 | |
| C7418 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C7422 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C7424 | ECEA1HKA010B | ALU ELEC CAPACITOR | 1 | |
| C7425 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C7426 | ECJ1VC1H471J | CHIP CAPACITOR | 1 | |
| C7428 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C7430 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C7431 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C7432 | F1H1H1030006 | CHIP CAPACITOR | 1 | DMR-EH80VEBS |
| C7432 | DOYBR0000020 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| C7433 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | DMR-EH80VEBS |
| C7434 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C7435 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C7436 | ECEA1HKA2R2B | ALU ELEC CAPACITOR | 1 | DMR-EH80VEBS |
| C7437 | DOYBR0000020 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| C7438 | DOYBR0000020 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| C7439 | DOYBR0000020 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| C7441 | ECJ1VC1H471J | CHIP CAPACITOR | 1 | |
| C7442 | F1H1H330A736 | CHIP CAPACITOR | 1 | |
| C7443 | F1H1H330A736 | CHIP CAPACITOR | 1 | |
| C7445 | ECEA0JKA101B | ALU ELEC CAPACITOR | 1 | |
| C7446 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C7448 | ECJ1VC1H471J | CHIP CAPACITOR | 1 | |
| C7449 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C7450 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C7452 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C7453 | F1H1H1030006 | CHIP CAPACITOR | 1 | |
| C7454 | F1H0J1050012 | CHIP CAPACITOR | 1 | |
| C7455 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C7456 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C7457 | FLJ1A105A003 | CHIP CAPACITOR | 1 | |
| C7465 | ECJ1VC1H471J | CHIP CAPACITOR | 1 | |
| C7466 | ECJ1VC1H471J | CHIP CAPACITOR | 1 | |
| C7476 | ECJ1VC1H471J | CHIP CAPACITOR | 1 | |
| C7477 | ECJ1VC1H471J | CHIP CAPACITOR | 1 | |
| C7501 | F1H1C104A008 | CHIP CAPACITOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|---------|
| C7502 | ECEA0JKA470B | ALU ELEC CAPACITOR | 1 | |
| C7525 | F1H1H1010005 | CHIP CAPACITOR | 1 | |
| C7752 | F2A0J221A016 | ALU ELEC CAPACITOR | 1 | |
| C7801 | F1H1C104A008 | CHIP CAPACITOR | 1 | |
| C7901 | F1H1H1030007 | CHIP CAPACITOR | 1 | |
| C7902 | ECEA1HKA100B | ALU ELEC CAPACITOR | 1 | |
| C7903 | F1H1H104A220 | CHIP CAPACITOR | 1 | |
| C7904 | F1H1C104A042 | CHIP CAPACITOR | 1 | |
| C7905 | F2A1C221A019 | ALU ELEC CAPACITOR | 1 | |
| C7906 | ECQB1H473JF4 | PLAST FILM CAPACITOR | 1 | |
| C7907 | F2A1A1010072 | ALU ELEC CAPACITOR | 1 | |
| C7908 | ECQB1H223JF3 | PLAST FILM CAPACITOR | 1 | |
| C7909 | F2A1H5600009 | ALU ELEC CAPACITOR | 1 | |
| C7910 | F2A1H5600009 | ALU ELEC CAPACITOR | 1 | |
| D11101 | B0EBKT000008 | DIODE | 1 | |
| D11102 | B0AAGV000004 | SWITCHING DIODE | 1 | |
| D11103 | B0AAGR000003 | SWITCHING DIODE | 1 | |
| D11104 | B0AAGV000004 | SWITCHING DIODE | 1 | |
| D11201 | MAZ73000BC | DIODE | 1 | |
| D11202 | MAZ73000BC | DIODE | 1 | |
| D11203 | B0AADM000003 | DIODE | 1 | |
| D11204 | B0AACK000004 | SWITCHING DIODE | 1 | |
| D11205 | MAZ80820ML | DIODE | 1 | |
| D11401 | B0JAMK000015 | DIODE | 1 | |
| D11402 | B0JAMK000015 | DIODE | 1 | |
| D11403 | B0JBSG000009 | BARRIER DIODE | 1 | |
| D11501 | B0JCPD000021 | DIODE | 1 | |
| D1501 | B3EA00000072 | DIODE | 1 | |
| D15001 | B0JCPE000015 | DIODE | 1 | |
| D15002 | B0JCPD000021 | DIODE | 1 | |
| D15003 | B0JCPD000021 | DIODE | 1 | |
| D2001 | B0AACK000004 | SWITCHING DIODE | 1 | |
| D2002 | B0AACK000004 | SWITCHING DIODE | 1 | |
| D2502 | MAZ4160NMF | DIODE | 1 | |
| D31501 | B0EAKL000062 | DIODE | 1 | |
| D3501 | B0AACK000004 | SWITCHING DIODE | 1 | |
| D37001 | B0AACK000004 | SWITCHING DIODE | 1 | |
| D37002 | B0AACK000004 | SWITCHING DIODE | 1 | |
| D37003 | MAZ4091NLF | DIODE | 1 | |
| D37502 | B0AACK000004 | SWITCHING DIODE | 1 | |
| D37503 | B0AACK000004 | SWITCHING DIODE | 1 | |
| D3901 | B0AACK000004 | SWITCHING DIODE | 1 | |
| D4501 | B0AACK000004 | SWITCHING DIODE | 1 | |
| D4502 | MAZ4056NHF | DIODE | 1 | |
| D4901 | MA2J11200L | DIODE | 1 | |
| D6306 | MAZ4056NHF | DIODE | 1 | |
| D6401 | B0AACK000004 | SWITCHING DIODE | 1 | |
| D6402 | B0ACCK000005 | DIODE | 1 | |
| D6801 | MAZ4051NMF | DIODE | 1 | |
| D7401 | MAZ4300NMF | DIODE | 1 | |
| D7402 | MAZ4300NMF | DIODE | 1 | |
| D7501 | B3AAA0000752 | DIODE | 1 | |
| D7502 | B3AEA0000069 | DIODE | 1 | |
| D7503 | B3ABA0000595 | LED | 1 | |
| D7504 | B3ACA0000273 | DIODE | 1 | |
| D7505 | B3AEA0000069 | DIODE | 1 | |
| D7506 | B3ADA0000173 | DIODE | 1 | |
| D7508 | B3AEA0000069 | DIODE | 1 | |
| D7751 | B0AACK000004 | SWITCHING DIODE | 1 | |
| D7901 | MAZ4220NMF | DIODE | 1 | |
| D7902 | B0AAGM000007 | DIODE | 1 | |
| D7903 | B0JAME000025 | DIODE | 1 | |
| D7904 | MA2C18500E | DIODE | 1 | |
| D7905 | MA2C18500E | DIODE | 1 | |
| D7906 | MAZ4300NMF | DIODE | 1 | |
| DP7501 | A2BB00000145 | FL DISPLAY | 1 | |
| F11101 | K5D202BK0005 | FUSE | 1 | △ |
| FL6801 | F1H0J4740004 | CHIP CAPACITOR | 1 | △ |
| IC11201 | C0DACZH00017 | IC | 1 | |
| IC11301 | C0DAEMB00003 | IC | 1 | △ |
| IC11501 | C0DBAKG00007 | IC | 1 | |
| IC1511 | B3NAA0000073 | IC | 1 | |
| IC1512 | B3NAA0000073 | IC | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|---------------|-------------------------|-----|---------|
| IC15001 | C0EBJ0000143 | IC | 1 | |
| IC15002 | C0DAAJG000007 | IC | 1 | |
| IC15003 | C0DBAKG000005 | IC | 1 | |
| IC15004 | C0DBAKG000007 | IC | 1 | |
| IC2501 | C1AB00001767 | IC | 1 | |
| IC3001 | C1AB00002080 | IC | 1 | |
| IC3002 | C0CBCDD000007 | IC | 1 | |
| IC3003 | C1AB00001681 | IC | 1 | |
| IC31502 | C0CBCBG000012 | IC | 1 | |
| IC31510 | C0CBCYE000001 | IC | 1 | |
| IC3501 | C1AB00001681 | IC | 1 | |
| IC3502 | AN3293S-E2V | IC | 1 | |
| IC35004 | C1AB00001486 | IC | 1 | |
| IC35005 | C9ZB00000498 | IC | 1 | |
| IC37001 | C0ABBA000146 | IC | 1 | |
| IC37501 | C2CBKH000211 | IC | 1 | |
| IC37502 | C3EBJC0000055 | IC | 1 | |
| IC37503 | C0EBH0000172 | IC | 1 | |
| IC37504 | C0CBCBC00037 | IC | 1 | |
| IC37505 | C0EBE0000194 | IC | 1 | |
| IC37508 | C0EBE0000504 | IC | 1 | |
| IC3901 | C1AB00002100 | IC | 1 | |
| IC3902 | C1AB00001681 | IC | 1 | |
| IC3903 | C1AB00001682 | IC | 1 | |
| IC3904 | C1AB00001682 | IC | 1 | |
| IC3906 | C0CBCDD000006 | IC | 1 | |
| IC4501 | AN3656NFBPBV | IC | 1 | |
| IC45001 | C0DBAHD00013 | IC | 1 | |
| IC45002 | C0ABBB000119 | IC | 1 | |
| IC45003 | C0ABBA000054 | IC | 1 | |
| IC6001 | C2CBJG0000544 | IC | 1 | |
| IC6101 | C1AB00002140 | IC | 1 | |
| IC6201 | C0EBH0000172 | IC | 1 | |
| IC6302 | C0CBCDC000020 | IC | 1 | |
| IC7301 | C1AB00002225 | IC | 1 | |
| IC7302 | C0EAH0000051 | IC | 1 | |
| IC7401 | C0CBCDD000006 | IC | 1 | |
| IC7402 | C0CBCDD000006 | IC | 1 | |
| IC7405 | C0CBCDD000006 | IC | 1 | |
| IC7502 | C0HBB0000048 | IC | 1 | |
| IC7801 | PNA4618M13VT | IC | 1 | |
| IP11501 | K5H3022A0013 | FUSE | 1 | △ |
| IP15001 | K5H3022A0013 | FUSE | 1 | |
| IP37501 | K5H5012A0010 | FUSE | 1 | |
| IP4901 | K5H5012A0010 | FUSE | 1 | |
| JK35001 | K1U717B000005 | CONNECTOR | 1 | |
| JK3802 | K1CB106A0012 | CONNECTOR | 1 | |
| JK3901 | K1FB121B0018 | CONNECTOR | 1 | |
| JK3902 | K1FB121B0018 | CONNECTOR | 1 | |
| JK4600 | K2HA307A0009 | CONNECTOR | 1 | |
| JK4901 | B3ZAZ0000017 | OPTICAL LINK | 1 | |
| K3005 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K3006 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K3009 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K37703 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K45003 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K45005 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K45009 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K4502 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K6002 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K6201 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K66801 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K7301 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K7302 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K7303 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K7305 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K7401 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K7403 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K7405 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K7503 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K7506 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K7507 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K7512 | D0YBR0000020 | CHIP RESISTOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|--------------|
| K7513 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| K7514 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| L11101 | G0B233D00001 | LINE FILTER | 1 | |
| L11102 | G0B233D00001 | LINE FILTER | 1 | △ |
| L11401 | G0A220GA0026 | CHOKE COIL RADIAL | 1 | |
| L11402 | G0A100H00025 | CHOKE COIL | 1 | |
| L11403 | G0A100HA0023 | CHOKE COIL | 1 | |
| L11501 | G0A150ZA0051 | CHOKE COIL | 1 | |
| L15001 | G0A100HA0023 | CHOKE COIL | 1 | |
| L15002 | G0A220GA0026 | CHOKE COIL RADIAL | 1 | |
| L15003 | G0A330ZA0041 | CHOKE COIL | 1 | |
| L15004 | G0A150ZA0041 | CHOKE COIL | 1 | |
| L15005 | G0A220ZA0041 | CHOKE COIL | 1 | |
| L3001 | G0C820JA0019 | CHOKE COIL AXIAL | 1 | |
| L3002 | G0C270JA0019 | CHOKE COIL AXIAL | 1 | |
| L3003 | G0C390JA0019 | CHOKE COIL AXIAL | 1 | |
| L3004 | G0C680JA0019 | CHOKE COIL AXIAL | 1 | |
| L3006 | G0C270JA0019 | CHOKE COIL AXIAL | 1 | |
| L3007 | ELJFAL20KFB | CHIP INDUCTOR | 1 | |
| L3008 | G0C680JA0019 | CHOKE COIL AXIAL | 1 | |
| L31501 | G0A220ZA0041 | CHOKE COIL | 1 | |
| L3501 | G0C560JA0019 | CHOKE COIL AXIAL | 1 | |
| L3502 | G0C330JA0019 | CHOKE COIL AXIAL | 1 | |
| L3503 | G0C330JA0019 | CHOKE COIL AXIAL | 1 | |
| L3504 | G0C330JA0019 | CHOKE COIL AXIAL | 1 | |
| L35001 | G0C680JA0019 | CHOKE COIL AXIAL | 1 | |
| L37101 | G0A100HA0023 | CHOKE COIL | 1 | |
| L4001 | G0C471KA0065 | FIXED INDUCTOR | 1 | |
| L4502 | G0C1R2J00004 | CHOKE COIL AXIAL | 1 | |
| L4503 | G0C101JA0019 | CHOKE COIL AXIAL | 1 | |
| L4901 | G0C220JA0019 | CHOKE COIL AXIAL | 1 | |
| L5001 | G0C680JA0019 | CHOKE COIL AXIAL | 1 | |
| L6101 | G0C100JA0019 | CHOKE COIL AXIAL | 1 | |
| L6103 | G0C1R5JA0019 | CHOKE COIL | 1 | |
| L6104 | G0C330JA0019 | CHOKE COIL AXIAL | 1 | DMR-EH80VEGS |
| L6105 | G0C680JA0019 | CHOKE COIL AXIAL | 1 | |
| L7303 | G0C1R0JA0019 | CHOKE COIL AXIAL | 1 | |
| L7401 | G0C2R2JA0019 | CHOKE COIL AXIAL | 1 | |
| L7403 | G0C270JA0019 | CHOKE COIL AXIAL | 1 | DMR-EH80VEBS |
| L7404 | G0C2R2JA0019 | CHOKE COIL AXIAL | 1 | |
| L7901 | G0A101EA0017 | CHOKE COIL | 1 | |
| LB11101 | J0JKB0000003 | BEAD CORE | 1 | |
| LB11102 | J0JKB0000003 | BEAD CORE | 1 | |
| LB11103 | J0JHC0000048 | BEAD CORE | 1 | |
| LB11201 | J0JHC0000048 | BEAD CORE | 1 | |
| LB11501 | J0JHC0000048 | BEAD CORE | 1 | |
| LB15001 | J0JHC0000048 | BEAD CORE | 1 | |
| LB15002 | J0JHC0000048 | BEAD CORE | 1 | |
| LB15003 | J0JHC0000048 | BEAD CORE | 1 | |
| LB15004 | J0JHC0000048 | BEAD CORE | 1 | |
| LB15005 | J0JHC0000048 | BEAD CORE | 1 | |
| LB15006 | J0JHC0000048 | BEAD CORE | 1 | |
| LB31505 | J0JKB0000003 | BEAD CORE | 1 | |
| LB3301 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB3302 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB3303 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB33502 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB33503 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB33504 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB34002 | J0JCC0000103 | BEAD CORE | 1 | |
| LB34003 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB35101 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB35102 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB35103 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB35104 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB35105 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB35106 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB37104 | J0JCC0000103 | BEAD CORE | 1 | |
| LB37105 | J0JHC0000032 | BEAD CORE | 1 | |
| LB37108 | J0JHC0000032 | BEAD CORE | 1 | |
| LB37109 | J0JHC0000032 | BEAD CORE | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|--------------|
| LB37506 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB37507 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB37508 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB37509 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB3902 | J0JGC0000020 | BEAD CORE | 1 | |
| LB4101 | J0JBC0000041 | BEAD CORE | 1 | |
| LB4102 | J0JBC0000041 | BEAD CORE | 1 | |
| LB4103 | J0JBC0000041 | BEAD CORE | 1 | |
| LB4104 | J0JBC0000041 | BEAD CORE | 1 | |
| LB4105 | J0JBC0000041 | BEAD CORE | 1 | |
| LB4106 | J0JBC0000041 | BEAD CORE | 1 | |
| LB4201 | J0JBC0000070 | CHIP INDUCTOR | 1 | |
| LB4202 | J0JBC0000070 | CHIP INDUCTOR | 1 | |
| LB4203 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB45101 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB45102 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB6101 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB6801 | J0JHC0000032 | BEAD CORE | 1 | |
| LB6802 | J0JHC0000045 | BEAD CORE | 1 | |
| LB7301 | J0JCC0000124 | BEAD CORE | 1 | |
| LB7302 | J0JCC0000124 | BEAD CORE | 1 | |
| LB7303 | J0JCC0000080 | BEAD CORE | 1 | |
| LB7401 | J0JHC0000032 | BEAD CORE | 1 | |
| LB7402 | J0JHC0000032 | BEAD CORE | 1 | |
| LB7403 | J0JHC0000032 | BEAD CORE | 1 | |
| LB7404 | J0JHC0000032 | BEAD CORE | 1 | |
| LB7405 | J0JHC0000032 | BEAD CORE | 1 | |
| LB7406 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB7407 | J0JHC0000032 | BEAD CORE | 1 | DMR-EH80VEBS |
| LB7408 | J0JHC0000032 | BEAD CORE | 1 | DMR-EH80VEBS |
| LB7409 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB7410 | J0JHC0000032 | BEAD CORE | 1 | |
| LB7411 | J0JHC0000032 | BEAD CORE | 1 | |
| LB7412 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB7413 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB7414 | J0JHC0000032 | BEAD CORE | 1 | DMR-EH80VEBS |
| LB7415 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| LB7416 | J0JHC0000032 | BEAD CORE | 1 | |
| LB7417 | J0JHC0000032 | BEAD CORE | 1 | |
| LB7901 | J0JKB0000028 | BEAD CORE | 1 | |
| P11001 | K1KA16AA0194 | CONNECTOR | 1 | |
| P11101 | K2AA2H000007 | AC INLET | 1 | △ |
| P12001 | K1KA04AA0180 | CONNECTOR | 1 | |
| P12002 | K1KA03AA0301 | CONNECTOR | 1 | |
| P15001 | K1KA16AA0194 | CONNECTOR | 1 | |
| P15002 | K1KA05AA0180 | CONNECTOR | 1 | |
| P15003 | K1KA04AA0180 | CONNECTOR | 1 | |
| P1531 | K1KA02A00375 | CONNECTOR | 1 | |
| P2501 | K1MN07A00019 | CONNECTOR | 1 | |
| P2571 | K1KA08A00290 | CONNECTOR | 1 | |
| P31901 | K1KA13A00074 | CONNECTOR | 1 | |
| P31902 | K1KA19A00007 | CONNECTOR | 1 | |
| P31903 | K1KA19A00007 | CONNECTOR | 1 | |
| P31904 | K1KA13A00074 | CONNECTOR | 1 | |
| P31905 | K1KA07A00083 | CONNECTOR | 1 | |
| P39702 | K1KA88A00003 | CONNECTOR | 1 | |
| P4001 | K1MZ02A00003 | CONNECTOR | 1 | |
| P4002 | K1MN06A00033 | CONNECTOR | 1 | |
| P5001 | K1MN09A00022 | CONNECTOR | 1 | |
| P6001 | K1KB13AA0032 | CONNECTOR 13POL. | 1 | |
| P6002 | K1KB19AA0032 | CONNECTOR 19POL. | 1 | |
| P6003 | K1KB19AA0032 | CONNECTOR 19POL. | 1 | |
| P6004 | K1KB13AA0032 | CONNECTOR 13POL. | 1 | |
| P6005 | K1KB07AA0032 | CONNECTOR | 1 | |
| P66801 | K1KA05BA0047 | CONNECTOR | 1 | |
| P66802 | K1NA09E00051 | CONNECTOR | 1 | |
| P66803 | K1MN15B00037 | CONNECTOR | 1 | |
| P66804 | K2HZ104B0015 | CONNECTOR | 1 | |
| PK7301 | K1MM07B00002 | CONNECTOR | 1 | |
| PK7302 | K1MM06B00002 | CONNECTOR | 1 | |
| PP4600 | K1KA12B00129 | CONNECTOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|--------------|
| PP7501 | K1KA10B00176 | CONNECTOR | 1 | |
| PP7502 | K1KA08B00210 | CONNECTOR | 1 | |
| PP7503 | K1KA08B00210 | CONNECTOR | 1 | |
| PS37501 | K1KB08B00043 | CONNECTOR | 1 | |
| PS37502 | K1KB10B00045 | CONNECTOR | 1 | |
| PS6001 | K1KB08B00043 | CONNECTOR | 1 | |
| PS6002 | K1KB12B00040 | CONNECTOR | 1 | |
| Q11301 | B3PBA0000237 | PHOTO COUPLER | 1 | △ |
| Q11501 | B1DHDD000022 | TRANSISTOR | 1 | |
| Q12001 | 2SD0601ARN | TRANSISTOR | 1 | |
| Q1501 | PNB2302MF | PHOTO TRANSISTOR | 1 | |
| Q1502 | PNB2302MF | PHOTO TRANSISTOR | 1 | |
| Q15001 | B1DHED000008 | TRANSISTOR | 1 | |
| Q15002 | B1DHDD000022 | TRANSISTOR | 1 | |
| Q15003 | B1DHDD000022 | TRANSISTOR | 1 | |
| Q3002 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q33501 | 2SB1218ARL | SS-TRANSISTOR | 1 | |
| Q33502 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q33503 | 2SB1218ARL | SS-TRANSISTOR | 1 | |
| Q33504 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q33505 | 2SB1218ARL | SS-TRANSISTOR | 1 | |
| Q3501 | 2SB1218ARL | SS-TRANSISTOR | 1 | |
| Q3502 | 2SB1218ARL | SS-TRANSISTOR | 1 | |
| Q3503 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q37001 | 2SD0874A0L | TRANSISTOR | 1 | |
| Q37002 | 2SD0874A0L | TRANSISTOR | 1 | |
| Q3901 | 2SD132800L | CHIP TRANSISTOR | 1 | |
| Q3902 | 2SD132800L | CHIP TRANSISTOR | 1 | |
| Q3903 | 2SD132800L | CHIP TRANSISTOR | 1 | |
| Q3904 | 2SD132800L | CHIP TRANSISTOR | 1 | |
| Q4001 | 2SD114900L | TRANSISTOR | 1 | |
| Q4002 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q4003 | 2SD0602ARL | TRANSISTOR | 1 | |
| Q4004 | 2SB0710ARL | TRANSISTOR | 1 | |
| Q4501 | B1AAGD000016 | TRANSISTOR | 1 | |
| Q4502 | 2SB0710ARL | TRANSISTOR | 1 | |
| Q4901 | 2SB0710ARL | TRANSISTOR | 1 | |
| Q6101 | 2SB1218ARL | SS-TRANSISTOR | 1 | DMR-EH80VEGS |
| Q6102 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q6103 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q6104 | 2SB1218ARL | SS-TRANSISTOR | 1 | |
| Q6305 | 2SD0601ARN | TRANSISTOR | 1 | |
| Q6401 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q6402 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q6403 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q6404 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q6801 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q7401 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q7402 | 2SD1819ARL | TRANSISTOR | 1 | DMR-EH80VEGS |
| Q7403 | 2SB1218ARL | SS-TRANSISTOR | 1 | |
| Q7501 | 2SD1819ARL | TRANSISTOR | 1 | |
| Q7901 | 2SD21770SA | TRANSISTOR | 1 | |
| Q7902 | 2SD1819ARL | TRANSISTOR | 1 | |
| QR15001 | UNR221300L | TRANSISTOR | 1 | |
| QR15002 | UNR221300L | TRANSISTOR | 1 | |
| QR15003 | UNR221300L | TRANSISTOR | 1 | |
| QR15004 | UNR221300L | TRANSISTOR | 1 | |
| QR15005 | UNR221300L | TRANSISTOR | 1 | |
| QR15007 | UNR221300L | TRANSISTOR | 1 | |
| QR3001 | UNR521300L | TRANSISTOR | 1 | |
| QR3002 | UNR521200L | TRANSISTOR | 1 | |
| QR3003 | UNR521200L | TRANSISTOR | 1 | |
| QR3005 | UNR521200L | TRANSISTOR | 1 | |
| QR33701 | UNR521100L | TRANSISTOR | 1 | |
| QR35007 | UNR521200L | TRANSISTOR | 1 | |
| QR35008 | UNR521200L | TRANSISTOR | 1 | |
| QR37501 | UNR521300L | TRANSISTOR | 1 | |
| QR37502 | UNR521200L | TRANSISTOR | 1 | |
| QR37503 | UNR521400L | TRANSISTOR | 1 | |
| QR3901 | UNR521100L | TRANSISTOR | 1 | |
| QR3902 | UNR521300L | TRANSISTOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|--------------|
| QR4003 | UNR521100L | TRANSISTOR | 1 | |
| QR4004 | UNR511100L | TRANSISTOR | 1 | |
| QR4005 | UNR521300L | TRANSISTOR | 1 | |
| QR4501 | UNR521100L | TRANSISTOR | 1 | |
| QR45001 | UNR511100L | TRANSISTOR | 1 | |
| QR45002 | UNR521600L | TRANSISTOR | 1 | |
| QR45003 | UNR521600L | TRANSISTOR | 1 | |
| QR45004 | UNR521600L | TRANSISTOR | 1 | |
| QR45005 | UNR521600L | TRANSISTOR | 1 | |
| QR45006 | UNR521100L | TRANSISTOR | 1 | |
| QR45007 | UNR521100L | TRANSISTOR | 1 | |
| QR45008 | UNR521100L | TRANSISTOR | 1 | |
| QR45009 | UNR521100L | TRANSISTOR | 1 | |
| QR4901 | UNR521300L | TRANSISTOR | 1 | |
| QR4902 | UNR511100L | TRANSISTOR | 1 | |
| QR4903 | UNR521600L | TRANSISTOR | 1 | |
| QR4904 | UNR521600L | TRANSISTOR | 1 | |
| QR4905 | UNR521600L | TRANSISTOR | 1 | |
| QR4906 | UNR521600L | TRANSISTOR | 1 | |
| QR4908 | UNR511300L | TRANSISTOR | 1 | DMR-EH80VEBS |
| QR4910 | UNR521600L | TRANSISTOR | 1 | DMR-EH80VEBS |
| QR4911 | UNR511300L | TRANSISTOR | 1 | |
| QR4912 | UNR521600L | TRANSISTOR | 1 | |
| QR4913 | UNR521600L | TRANSISTOR | 1 | |
| QR4914 | UNR521300L | TRANSISTOR | 1 | |
| QR6402 | UNR521500L | TRANSISTOR | 1 | |
| QR6403 | UNR521500L | TRANSISTOR | 1 | |
| QR6801 | UNR511300L | TRANSISTOR | 1 | |
| QR7401 | UNR511200L | TRANSISTOR | 1 | |
| QR7402 | UNR511200L | TRANSISTOR | 1 | DMR-EH80VEGS |
| QR7501 | UNR521100L | TRANSISTOR | 1 | |
| QR7502 | UNR521100L | TRANSISTOR | 1 | |
| QR7503 | UNR521100L | TRANSISTOR | 1 | |
| QR7504 | UNR521100L | TRANSISTOR | 1 | |
| QR7505 | UNR521100L | TRANSISTOR | 1 | |
| QR7506 | UNR521100L | TRANSISTOR | 1 | |
| QR7508 | UNR521100L | TRANSISTOR | 1 | |
| R11103 | ERG2SJ153E | METAL OXIDE RESISTOR | 1 | |
| R11104 | ERG2SJ153E | METAL OXIDE RESISTOR | 1 | |
| R11105 | ERX2SZJR18E | METAL RESISTOR | 1 | |
| R11106 | ERG2SJ223E | METAL OXIDE RESISTOR | 1 | |
| R11107 | ERG2SJ153E | METAL OXIDE RESISTOR | 1 | |
| R11201 | ERJ6GEYG273V | CHIP RESISTOR | 1 | |
| R11202 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| R11203 | ERJ6GEYJ223V | CHIP RESISTOR | 1 | |
| R11204 | ERJ6GEYJ470V | CHIP RESISTOR | 1 | |
| R11205 | ERJ6GEYJ470V | CHIP RESISTOR | 1 | |
| R11206 | ERJ6GEYG822V | CHIP RESISTOR | 1 | |
| R11207 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| R11208 | ERJ6GEYG471V | CHIP RESISTOR | 1 | |
| R11209 | ERJ6GEYG752V | CHIP RESISTOR | 1 | |
| R11301 | ERJ6GEYJ222V | CHIP RESISTOR | 1 | |
| R11302 | ERJ6GEYJ102V | CHIP RESISTOR | 1 | |
| R11303 | ERJ6GEYJ102V | CHIP RESISTOR | 1 | |
| R11304 | ERJ6GEYJ103V | CHIP RESISTOR | 1 | |
| R11305 | ERJ6GEYG912V | CHIP RESISTOR | 1 | |
| R11308 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| R11309 | ERJ6GEYG471V | CHIP RESISTOR | 1 | |
| R11312 | ERJ6GEYG242V | CHIP RESISTOR | 1 | |
| R11501 | D1BFR0150001 | RESISTOR ARRAY | 1 | |
| R11502 | ERJ6RBD302V | CHIP RESISTOR | 1 | |
| R11503 | ERJ6RBD153V | CHIP RESISTOR | 1 | |
| R11504 | ERJ6RBD272V | CHIP RESISTOR | 1 | |
| R11505 | ERJ6GEYJ513V | CHIP RESISTOR | 1 | |
| R12001 | ERJ6GEYJ473V | CHIP RESISTOR | 1 | |
| R15001 | ERJ6GEYJ472V | CHIP RESISTOR | 1 | |
| R15002 | ERJ6GEYJ103V | CHIP RESISTOR | 1 | |
| R15003 | ERJ6GEYJ473V | CHIP RESISTOR | 1 | |
| R15005 | ERJ6GEYJ104V | CHIP RESISTOR | 1 | |
| R15006 | ERJ6RBD272V | CHIP RESISTOR | 1 | |
| R15007 | ERJ6RBD561V | CHIP RESISTOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|---------|
| R15008 | ERJ6RBD102V | CHIP RESISTOR | 1 | |
| R1501 | D0GB273JA057 | CHIP RESISTOR | 1 | |
| R15010 | ERJ6GEYJ513V | CHIP RESISTOR | 1 | |
| R15011 | D1BFR0150001 | RESISTOR ARRAY | 1 | |
| R15012 | ERJ6RBD272V | CHIP RESISTOR | 1 | |
| R15013 | ERJ6RBD123V | CHIP RESISTOR | 1 | |
| R15014 | ERJ6RBD472V | CHIP RESISTOR | 1 | |
| R15015 | D1BFR047A010 | RESISTOR ARRAY | 1 | |
| R15016 | ERJ6GEYJ333V | CHIP RESISTOR | 1 | |
| R15017 | ERJ6RBD562V | CHIP RESISTOR | 1 | |
| R15018 | ERJ6RBD152V | CHIP RESISTOR | 1 | |
| R15019 | ERJ6RBD392V | CHIP RESISTOR | 1 | |
| R1502 | D0GB273JA057 | CHIP RESISTOR | 1 | |
| R15026 | ERJ6GEYJ103V | CHIP RESISTOR | 1 | |
| R15027 | ERJ6GEYJ472V | CHIP RESISTOR | 1 | |
| R1503 | ERDS2TJ151T | CARBON RESISTOR | 1 | |
| R1511 | D0GB273JA057 | CHIP RESISTOR | 1 | |
| R1512 | D0GB273JA057 | CHIP RESISTOR | 1 | |
| R1513 | ERJ6GEYJ121V | CHIP RESISTOR | 1 | |
| R2001 | D0GB392JA057 | CHIP RESISTOR | 1 | |
| R2002 | D0GB105JA057 | CHIP RESISTOR | 1 | |
| R2099 | D0GB682JA057 | CHIP RESISTOR | 1 | |
| R2501 | ERJ6GEYJ1R2V | CHIP RESISTOR | 1 | |
| R2502 | ERJ6GEYJ1R5V | CHIP RESISTOR | 1 | |
| R2503 | ERDS2TJ182T | CARBON RESISTOR | 1 | |
| R2514 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R2515 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R2516 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R2520 | D0GB183JA057 | CHIP RESISTOR | 1 | |
| R2521 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R2551 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R2552 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R2561 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R2562 | D0GB473JA057 | CHIP RESISTOR | 1 | |
| R2563 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R2564 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R2565 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R3001 | D0GB152JA057 | CHIP RESISTOR | 1 | |
| R3002 | D0GB622JA057 | CHIP RESISTOR | 1 | |
| R3003 | D0GB562JA057 | CHIP RESISTOR | 1 | |
| R3005 | D0GB122JA057 | CHIP RESISTOR | 1 | |
| R3007 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R3008 | D0GB106JA057 | CHIP RESISTOR | 1 | |
| R3010 | D0GB153JA057 | CHIP RESISTOR | 1 | |
| R3013 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R3014 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R3015 | D0GB273JA057 | CHIP RESISTOR | 1 | |
| R3016 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R3017 | D0GB332JA057 | CHIP RESISTOR | 1 | |
| R3020 | D0GB332JA057 | CHIP RESISTOR | 1 | |
| R3021 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R3023 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R3024 | D0GB682JA057 | CHIP RESISTOR | 1 | |
| R31501 | D1BB6802A010 | CHIP RESISTOR | 1 | |
| R31502 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R31503 | D1BB22020002 | CHIP RESISTOR | 1 | |
| R31512 | ERDS2TJ271T | CARBON RESISTOR | 1 | |
| R31513 | ERDS2TJ271T | CARBON RESISTOR | 1 | |
| R33501 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R33502 | D0GB104JA057 | CHIP RESISTOR | 1 | |
| R33503 | D0GB392JA057 | CHIP RESISTOR | 1 | |
| R33504 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R33505 | D1BB1502A010 | CHIP RESISTOR | 1 | |
| R33506 | D1BB15010002 | CHIP RESISTOR | 1 | |
| R33507 | D0GB104JA057 | CHIP RESISTOR | 1 | |
| R33508 | D1BB5601A010 | CHIP RESISTOR | 1 | |
| R33509 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R33510 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R33511 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R33707 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R34002 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R34008 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R34009 | D0YBR0000020 | CHIP RESISTOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|---------|
| R34011 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R3501 | D1BB5600A010 | CHIP RESISTOR | 1 | |
| R3502 | D1BB1001A010 | CHIP RESISTOR | 1 | |
| R3503 | D0GB122JA057 | CHIP RESISTOR | 1 | |
| R3504 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R3505 | D0GB122JA057 | CHIP RESISTOR | 1 | |
| R3507 | D1BB1201A010 | CHIP RESISTOR | 1 | |
| R3508 | D0GB394JA057 | CHIP RESISTOR | 1 | |
| R3509 | D1BB1001A010 | CHIP RESISTOR | 1 | |
| R3510 | D1BB4700A010 | CHIP RESISTOR | 1 | |
| R3511 | D1BB33010002 | CHIP RESISTOR | 1 | |
| R3512 | D1BB33010002 | CHIP RESISTOR | 1 | |
| R3513 | D1BB15010002 | CHIP RESISTOR | 1 | |
| R3515 | D1BB1201A010 | CHIP RESISTOR | 1 | |
| R3516 | D1BB1001A010 | CHIP RESISTOR | 1 | |
| R35015 | D1BB75R0A010 | CHIP RESISTOR | 1 | |
| R35017 | D1BB75R0A010 | CHIP RESISTOR | 1 | |
| R35018 | D1BB75R0A010 | CHIP RESISTOR | 1 | |
| R35019 | D1BB75R0A010 | CHIP RESISTOR | 1 | |
| R35020 | D1BB75R0A010 | CHIP RESISTOR | 1 | |
| R35021 | D1BB75R0A010 | CHIP RESISTOR | 1 | |
| R35026 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R35027 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R35031 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R37001 | D0GB821JA057 | CHIP RESISTOR | 1 | |
| R37002 | D0GB821JA057 | CHIP RESISTOR | 1 | |
| R37003 | D0GB183JA057 | CHIP RESISTOR | 1 | |
| R37004 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R37501 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37502 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R37503 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37504 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R37505 | D0GB473JA057 | CHIP RESISTOR | 1 | |
| R37506 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R37511 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37512 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37530 | D0GB473JA057 | CHIP RESISTOR | 1 | |
| R37531 | D0GB473JA057 | CHIP RESISTOR | 1 | |
| R37532 | D0GB473JA057 | CHIP RESISTOR | 1 | |
| R37533 | D0GB473JA057 | CHIP RESISTOR | 1 | |
| R37534 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37535 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37536 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37537 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37538 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R37539 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R37540 | D0GB332JA057 | CHIP RESISTOR | 1 | |
| R37541 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R37542 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R37544 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R37545 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R37546 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R37547 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R37548 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R37549 | D0GB511JA057 | CHIP RESISTOR | 1 | |
| R37550 | D0GB202JA057 | CHIP RESISTOR | 1 | |
| R37551 | D0GB202JA057 | CHIP RESISTOR | 1 | |
| R37556 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37557 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37558 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37559 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37561 | D0GB392JA057 | CHIP RESISTOR | 1 | |
| R37562 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37563 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37565 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37566 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37569 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37571 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37572 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37573 | D0GB181JA057 | CHIP RESISTOR | 1 | |
| R37575 | D0GB104JA057 | CHIP RESISTOR | 1 | |
| R37577 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37578 | D0GB101JA057 | CHIP RESISTOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|--------------|
| R37581 | D1BB3902A010 | CHIP RESISTOR | 1 | |
| R37582 | D1BB4302A010 | CHIP RESISTOR | 1 | |
| R37583 | D0GB473JA057 | CHIP RESISTOR | 1 | |
| R37584 | D0GB473JA057 | CHIP RESISTOR | 1 | |
| R37585 | D0GB223JA057 | CHIP RESISTOR | 1 | |
| R37588 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R37596 | D0GB473JA057 | CHIP RESISTOR | 1 | |
| R37597 | D0GB153JA057 | CHIP RESISTOR | 1 | |
| R37599 | D0GB223JA057 | CHIP RESISTOR | 1 | |
| R37600 | D0GB153JA057 | CHIP RESISTOR | 1 | |
| R37604 | D0GB822JA057 | CHIP RESISTOR | 1 | |
| R37605 | D0GB822JA057 | CHIP RESISTOR | 1 | |
| R37606 | D0GB822JA057 | CHIP RESISTOR | 1 | |
| R37612 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R37633 | D0GB223JA057 | CHIP RESISTOR | 1 | |
| R3801 | D0GB750JA057 | CHIP RESISTOR | 1 | |
| R3802 | D0GB750JA057 | CHIP RESISTOR | 1 | |
| R3803 | D0GB750JA057 | CHIP RESISTOR | 1 | |
| R3804 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R3901 | ERJ6GEYG750V | CHIP RESISTOR | 1 | |
| R3902 | ERJ6GEYG750V | CHIP RESISTOR | 1 | |
| R3903 | ERJ6GEYG750V | CHIP RESISTOR | 1 | |
| R3904 | ERJ6GEYG750V | CHIP RESISTOR | 1 | |
| R3905 | ERJ6GEYG750V | CHIP RESISTOR | 1 | |
| R3906 | ERJ6GEYG750V | CHIP RESISTOR | 1 | |
| R3907 | ERDS2TJ221T | CARBON RESISTOR | 1 | |
| R3908 | ERJ6GEYJ750V | CHIP RESISTOR | 1 | |
| R3909 | ERJ6GEYG750V | CHIP RESISTOR | 1 | |
| R3910 | ERJ3RED750V | CHIP RESISTOR | 1 | |
| R3911 | ERJ3RED750V | CHIP RESISTOR | 1 | |
| R3912 | ERJ3RED750V | CHIP RESISTOR | 1 | |
| R3913 | ERJ6GEYG750V | CHIP RESISTOR | 1 | |
| R3914 | D0GB330JA057 | CHIP RESISTOR | 1 | |
| R3915 | D0GB822JA057 | CHIP RESISTOR | 1 | |
| R3916 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R3917 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R3918 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R3919 | D0GB154JA057 | CHIP RESISTOR | 1 | |
| R3920 | D0GB154JA057 | CHIP RESISTOR | 1 | |
| R3921 | D0GB682JA057 | CHIP RESISTOR | 1 | |
| R3922 | D0GB682JA057 | CHIP RESISTOR | 1 | |
| R3923 | D0GB124JA057 | CHIP RESISTOR | 1 | |
| R3924 | D0GB124JA057 | CHIP RESISTOR | 1 | |
| R3925 | D0GB153JA057 | CHIP RESISTOR | 1 | |
| R3934 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R4001 | D0GB332JA057 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| R4001 | D0GB202JA057 | CHIP RESISTOR | 1 | DMR-EH80VEGS |
| R4002 | D0GB153JA057 | CHIP RESISTOR | 1 | |
| R4003 | D0GB682JA057 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| R4003 | D0GB392JA057 | CHIP RESISTOR | 1 | DMR-EH80VEGS |
| R4004 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R4006 | D0GB332JA057 | CHIP RESISTOR | 1 | |
| R4007 | D0GB104JA057 | CHIP RESISTOR | 1 | |
| R4008 | D0GB153JA057 | CHIP RESISTOR | 1 | |
| R4009 | D0GB271JA057 | CHIP RESISTOR | 1 | |
| R4011 | D0GB203JA057 | CHIP RESISTOR | 1 | |
| R4012 | D0GB474JA057 | CHIP RESISTOR | 1 | |
| R4013 | D0GB153JA057 | CHIP RESISTOR | 1 | |
| R4014 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R4015 | D0GB332JA057 | CHIP RESISTOR | 1 | |
| R4016 | D0GB222JA057 | CHIP RESISTOR | 1 | |
| R4017 | D0GB222JA057 | CHIP RESISTOR | 1 | |
| R4018 | ERJ6GEYJ102V | CHIP RESISTOR | 1 | |
| R4019 | ERJ6GEYJ102V | CHIP RESISTOR | 1 | |
| R4101 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R4102 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R4103 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R4104 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R4305 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R4306 | D0GB471JA057 | CHIP RESISTOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|--------------|
| R4501 | D0GB563JA057 | CHIP RESISTOR | 1 | |
| R4502 | D0GB563JA057 | CHIP RESISTOR | 1 | |
| R4503 | D0GB223JA057 | CHIP RESISTOR | 1 | |
| R4504 | D0GB223JA057 | CHIP RESISTOR | 1 | |
| R4505 | D0GB432JA057 | CHIP RESISTOR | 1 | |
| R4506 | D0GB432JA057 | CHIP RESISTOR | 1 | |
| R4507 | D0GB912JA057 | CHIP RESISTOR | 1 | |
| R4508 | D0GB432JA057 | CHIP RESISTOR | 1 | |
| R4509 | D0GB432JA057 | CHIP RESISTOR | 1 | |
| R4510 | D0GB912JA057 | CHIP RESISTOR | 1 | |
| R4511 | D0GB432JA057 | CHIP RESISTOR | 1 | |
| R4512 | D0GB432JA057 | CHIP RESISTOR | 1 | |
| R4513 | D0GB563JA057 | CHIP RESISTOR | 1 | |
| R4514 | D0GB563JA057 | CHIP RESISTOR | 1 | |
| R4515 | D0GB563JA057 | CHIP RESISTOR | 1 | |
| R4516 | D0GB563JA057 | CHIP RESISTOR | 1 | |
| R4517 | D0GB511JA057 | CHIP RESISTOR | 1 | |
| R4518 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R4519 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R4520 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R4521 | D0GB124JA057 | CHIP RESISTOR | 1 | |
| R4522 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R4523 | D0GB511JA057 | CHIP RESISTOR | 1 | |
| R4524 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R4525 | D0GB333JA057 | CHIP RESISTOR | 1 | |
| R4526 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R4527 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R4528 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R4530 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R4532 | D0GB681JA057 | CHIP RESISTOR | 1 | |
| R4554 | D0GB683JA057 | CHIP RESISTOR | 1 | |
| R4555 | ERDS2TJ821T | CARBON RESISTOR | 1 | |
| R4557 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R4558 | D0GB683JA057 | CHIP RESISTOR | 1 | |
| R4559 | D0GB393JA057 | CHIP RESISTOR | 1 | |
| R4560 | D0GB682JA057 | CHIP RESISTOR | 1 | |
| R45001 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R45002 | D0HB202ZA002 | CHIP RESISTOR | 1 | |
| R45003 | D0HB222ZA002 | CHIP RESISTOR | 1 | |
| R45004 | D0HB183ZA002 | CHIP RESISTOR | 1 | |
| R45005 | D0HB103ZA002 | METAL FILM RESISTOR | 1 | |
| R45006 | D0GB473JA057 | CHIP RESISTOR | 1 | |
| R45007 | D0HB183ZA002 | CHIP RESISTOR | 1 | |
| R45008 | D0HB103ZA002 | METAL FILM RESISTOR | 1 | |
| R45009 | D0GB473JA057 | CHIP RESISTOR | 1 | |
| R45010 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R45011 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R45012 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R45013 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R45014 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R45015 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R45016 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R45017 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R45018 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R45019 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R4903 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R4905 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R4906 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R4907 | D0GB471JA057 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| R4908 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R4909 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R4910 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R4911 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R4916 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R4917 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R4922 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R4923 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R4924 | D0GB225JA057 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| R4925 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R4926 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R4927 | D0GB223JA057 | CHIP RESISTOR | 1 | DMR-EH80VEGS |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|--------------|
| R6001 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R6002 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R6004 | D0GB433JA057 | CHIP RESISTOR | 1 | |
| R6006 | D0GB273JA057 | CHIP RESISTOR | 1 | |
| R6007 | D0GB183JA057 | CHIP RESISTOR | 1 | |
| R6008 | D0GB222JA057 | CHIP RESISTOR | 1 | |
| R6009 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R6010 | D0GB393JA057 | CHIP RESISTOR | 1 | |
| R6011 | D0GB183JA057 | CHIP RESISTOR | 1 | |
| R6012 | D0GB681JA057 | CHIP RESISTOR | 1 | |
| R6013 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R6014 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R6016 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R6017 | D0GB222JA057 | CHIP RESISTOR | 1 | |
| R6018 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R6019 | D0GB681JA057 | CHIP RESISTOR | 1 | |
| R6020 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R6022 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R6023 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R6024 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R6025 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R6026 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R6027 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R6028 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R6029 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R6030 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R6031 | D0GB223JA057 | CHIP RESISTOR | 1 | |
| R6033 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R6035 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R6036 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R6101 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R6102 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R6103 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R6109 | D0GB105JA057 | CHIP RESISTOR | 1 | |
| R6110 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R6111 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R6112 | D0GB272JA057 | CHIP RESISTOR | 1 | |
| R6113 | D0GB562JA057 | CHIP RESISTOR | 1 | |
| R6114 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R6115 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R6116 | D0GB152JA057 | CHIP RESISTOR | 1 | DMR-EH80VEGS |
| R6117 | D0GB181JA057 | CHIP RESISTOR | 1 | |
| R6118 | D0GB473JA057 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| R6119 | D0GB241JA057 | CHIP RESISTOR | 1 | |
| R6120 | D0GB102JA057 | CHIP RESISTOR | 1 | |
| R6121 | D0GB561JA057 | CHIP RESISTOR | 1 | |
| R6122 | D0GB561JA057 | CHIP RESISTOR | 1 | |
| R6123 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R6131 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R6201 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R6309 | D0GB272JA057 | CHIP RESISTOR | 1 | |
| R6401 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R6402 | D0GB153JA057 | CHIP RESISTOR | 1 | |
| R6403 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R6404 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R6405 | D0GB223JA057 | CHIP RESISTOR | 1 | |
| R6406 | D0GB474JA057 | CHIP RESISTOR | 1 | |
| R6407 | D0GB153JA057 | CHIP RESISTOR | 1 | |
| R6408 | D0GB104JA057 | CHIP RESISTOR | 1 | |
| R6409 | D0GB104JA057 | CHIP RESISTOR | 1 | |
| R6410 | D0GB224JA057 | CHIP RESISTOR | 1 | |
| R6411 | D0GB225JA057 | CHIP RESISTOR | 1 | |
| R6412 | D0GB433JA057 | CHIP RESISTOR | 1 | |
| R6413 | D0GB473JA057 | CHIP RESISTOR | 1 | |
| R6414 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R66801 | D0GB123JA057 | CHIP RESISTOR | 1 | |
| R66802 | D0GB123JA057 | CHIP RESISTOR | 1 | |
| R66804 | D0GB123JA057 | CHIP RESISTOR | 1 | |
| R66805 | D0GB123JA057 | CHIP RESISTOR | 1 | |
| R66806 | D0GB123JA057 | CHIP RESISTOR | 1 | |
| R66807 | D0GB223JA057 | CHIP RESISTOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|--------------|
| R66808 | D0GB223JA057 | CHIP RESISTOR | 1 | |
| R66809 | D0GB750JA057 | CHIP RESISTOR | 1 | |
| R66810 | D0GB750JA057 | CHIP RESISTOR | 1 | |
| R66811 | D0GB750JA057 | CHIP RESISTOR | 1 | |
| R66812 | D0GB750JA057 | CHIP RESISTOR | 1 | |
| R66813 | D0GB750JA057 | CHIP RESISTOR | 1 | |
| R66814 | D0GB750JA057 | CHIP RESISTOR | 1 | |
| R66815 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R66816 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R66817 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R66818 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R66819 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R6801 | D0GB104JA057 | CHIP RESISTOR | 1 | |
| R6802 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R6803 | D0GB474JA057 | CHIP RESISTOR | 1 | |
| R7301 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R7304 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R7307 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R7309 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R7310 | D0GB221JA057 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| R7311 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R7312 | D1BB2200A010 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| R7312 | D1BB18010002 | CHIP RESISTOR | 1 | DMR-EH80VEGS |
| R7313 | D1BB2200A010 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| R7313 | D1BB18010002 | CHIP RESISTOR | 1 | DMR-EH80VEGS |
| R7314 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R7315 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R7317 | D0YBR0000020 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| R7317 | J0JCC0000103 | BEAD CORE | 1 | DMR-EH80VEGS |
| R7319 | D0YBR0000020 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| R7319 | J0JCC0000103 | BEAD CORE | 1 | DMR-EH80VEGS |
| R7322 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R7324 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R7325 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R7401 | ERDS2TJ331T | CARBON RESISTOR | 1 | |
| R7402 | ERDS2TJ331T | CARBON RESISTOR | 1 | |
| R7403 | ERDS2TJ331T | CARBON RESISTOR | 1 | |
| R7404 | ERDS2TJ331T | CARBON RESISTOR | 1 | |
| R7405 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R7406 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R7410 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R7411 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R7413 | D0YBR0000020 | CHIP RESISTOR | 1 | DMR-EH80VEGS |
| R7414 | D0GB101JA057 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| R7415 | D0GB101JA057 | CHIP RESISTOR | 1 | DMR-EH80VEBS |
| R7416 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R7417 | D0GB471JA057 | CHIP RESISTOR | 1 | |
| R7418 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R7419 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R7420 | D0GB681JA057 | CHIP RESISTOR | 1 | |
| R7421 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R7422 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R7433 | D0GB104JA057 | CHIP RESISTOR | 1 | |
| R7434 | D0GB104JA057 | CHIP RESISTOR | 1 | DMR-EH80VEGS |
| R7435 | D0GB562JA057 | CHIP RESISTOR | 1 | DMR-EH80VEGS |
| R7436 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R7437 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R7501 | D0GB271JA057 | CHIP RESISTOR | 1 | |
| R7502 | D0GB151JA002 | CHIP RESISTOR | 1 | |
| R7503 | D0GB681JA057 | CHIP RESISTOR | 1 | |
| R7504 | D0GB391JA057 | CHIP RESISTOR | 1 | |
| R7505 | D0GB471JA057 | CHIP RESISTOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|---------|
| R7506 | D0GB391JA057 | CHIP RESISTOR | 1 | |
| R7508 | D0GB122JA057 | CHIP RESISTOR | 1 | |
| R7509 | D0GB122JA057 | CHIP RESISTOR | 1 | |
| R7510 | ERDS2TJ5R6T | CARBON RESISTOR | 1 | |
| R7511 | D0GB152JA057 | CHIP RESISTOR | 1 | |
| R7512 | D0GB103JA057 | CHIP RESISTOR | 1 | |
| R7513 | D0GB683JA057 | CHIP RESISTOR | 1 | |
| R7514 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| R7515 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R7516 | D0GB152JA057 | CHIP RESISTOR | 1 | |
| R7517 | D0GB222JA057 | CHIP RESISTOR | 1 | |
| R7518 | D0GB151JA002 | CHIP RESISTOR | 1 | |
| R7525 | D0GB273JA057 | CHIP RESISTOR | 1 | |
| R7526 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R7527 | D0GB101JA057 | CHIP RESISTOR | 1 | |
| R7528 | D0GB222JA057 | CHIP RESISTOR | 1 | |
| R7529 | D0GB332JA057 | CHIP RESISTOR | 1 | |
| R7530 | D0GB152JA057 | CHIP RESISTOR | 1 | |
| R7531 | D0GB122JA057 | CHIP RESISTOR | 1 | |
| R7532 | D0GB222JA057 | CHIP RESISTOR | 1 | |
| R7801 | D0GB221JA057 | CHIP RESISTOR | 1 | |
| R7802 | D0GB182JA057 | CHIP RESISTOR | 1 | |
| R7803 | D0GB332JA057 | CHIP RESISTOR | 1 | |
| R7806 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R7807 | D0GB182JA057 | CHIP RESISTOR | 1 | |
| R7808 | D0GB332JA057 | CHIP RESISTOR | 1 | |
| R7809 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R7810 | D0GB682JA057 | CHIP RESISTOR | 1 | |
| R7812 | D0GB123JA057 | CHIP RESISTOR | 1 | |
| R7813 | D0GB273JA057 | CHIP RESISTOR | 1 | |
| R7901 | ERDS2TJ561T | CARBON RESISTOR | 1 | |
| R7902 | ERDS2TJ333T | CARBON RESISTOR | 1 | |
| R7903 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R7904 | D0GB472JA057 | CHIP RESISTOR | 1 | |
| R7905 | D0GB223JA057 | CHIP RESISTOR | 1 | |
| R7906 | D0GB223JA057 | CHIP RESISTOR | 1 | |
| R7907 | ERDS2TJ101T | CARBON RESISTOR | 1 | |
| R7909 | D0GB393JA057 | CHIP RESISTOR | 1 | |
| S1531 | K0C11A00006 | SAFETY TAB SWITCH | 1 | |
| S1532 | K0ZZ00000598 | MODE SWITCH | 1 | |
| S7501 | EVQ11G04M | TOUCH SWITCH | 1 | |
| S7502 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7503 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7504 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7505 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7506 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7509 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7510 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7511 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7512 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7513 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7514 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7515 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7801 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7802 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7803 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7805 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7806 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7807 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7808 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7809 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7810 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7812 | EVQ11G07K | TOUCH SWITCH | 1 | |
| S7813 | EVQ11G07K | TOUCH SWITCH | 1 | |
| T11101 | G4D3A0000188 | SWITCH. TRANSFORMER | 1 | △ |
| T4001 | G2A362C00004 | BIAS TRANSFORMER | 1 | |
| T7901 | ETS13TB159AP | TRANSFORMER | 1 | |
| VA11101 | ERZVA5V471 | SURGE ABSORBER | 1 | △ |
| W501 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W501 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W502 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W503 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W503 | D0YDR0000006 | CHIP RESISTOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|---------|
| W504 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W505 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W505 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W506 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W507 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W507 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W508 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W509 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W510 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W511 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W512 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W513 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W514 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W516 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W517 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W518 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W519 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W520 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W521 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W6 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W7 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W701 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W702 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W703 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W704 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W705 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W706 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W707 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W708 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W709 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W710 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W711 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W712 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W713 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W714 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W715 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W716 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W717 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W718 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W719 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W720 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W721 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W722 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W724 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W725 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W726 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W727 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W728 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W729 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W730 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W731 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W732 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W733 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W734 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W735 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W736 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W737 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W738 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W739 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W740 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W741 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W742 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W743 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W744 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W745 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W746 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W747 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W748 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W749 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W750 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W751 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W752 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W753 | D0YBR0000020 | CHIP RESISTOR | 1 | |

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|----------|--------------|-------------------------|-----|---------|
| W754 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W755 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W756 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W757 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W758 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W759 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W760 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W761 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W762 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W763 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W764 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W765 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W766 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W767 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W768 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W769 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W770 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W771 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W772 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W773 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W774 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W775 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W776 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W777 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W778 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W779 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W780 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W781 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W782 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W783 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W784 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W785 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W786 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W787 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W788 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W789 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W790 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W791 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W792 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W793 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W794 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W795 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W796 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W797 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W798 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W799 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W800 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W801 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W802 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W803 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| W804 | D0YDR0000006 | CHIP RESISTOR | 1 | |
| W805 | D0YBR0000020 | CHIP RESISTOR | 1 | |
| X3001 | H0D443400040 | CRYSTAL OSCILLATOR | 1 | |
| X3002 | H0D357400067 | CRYSTAL OSCILLATOR | 1 | |
| X37501 | H0D100500006 | CRYSTAL OSCILLATOR | 1 | |
| X37502 | H0A327200108 | CRYSTAL OCSILLATOR | 1 | |
| X6001 | H0D120500009 | CRYSTAL OSCILLATOR | 1 | |
| X7301 | H0D245500016 | CRYSTAL OSCILLATOR | 1 | |
| ZA11005 | K9ZZ00001279 | EARTH FITTING | 1 | |
| ZA11006 | K9ZZ00001279 | EARTH FITTING | 1 | |
| ZA11101 | EYF52BCY | FUSE HOLDER | 1 | |
| ZA11102 | EYF52BCY | FUSE HOLDER | 1 | |
| ZA11200 | VSC5757 | HEAT SINK | 1 | |
| ZA11400 | VSC5604 | HEAT SINK | 1 | |
| ZG11200 | VSC5763 | HEAT RADIATION SEAT | 1 | |
| ZJ3101 | VMC1359 | EARTH SPRING | 1 | |
| ZJ37301 | K9ZZ00001279 | EARTH FITTING | 1 | |
| ZJ37303 | K9ZZ00001279 | EARTH FITTING | 1 | |
| ZJ37305 | K9ZZ00001279 | EARTH FITTING | 1 | |
| ZJ6001 | K9ZZ00001279 | EARTH FITTING | 1 | |

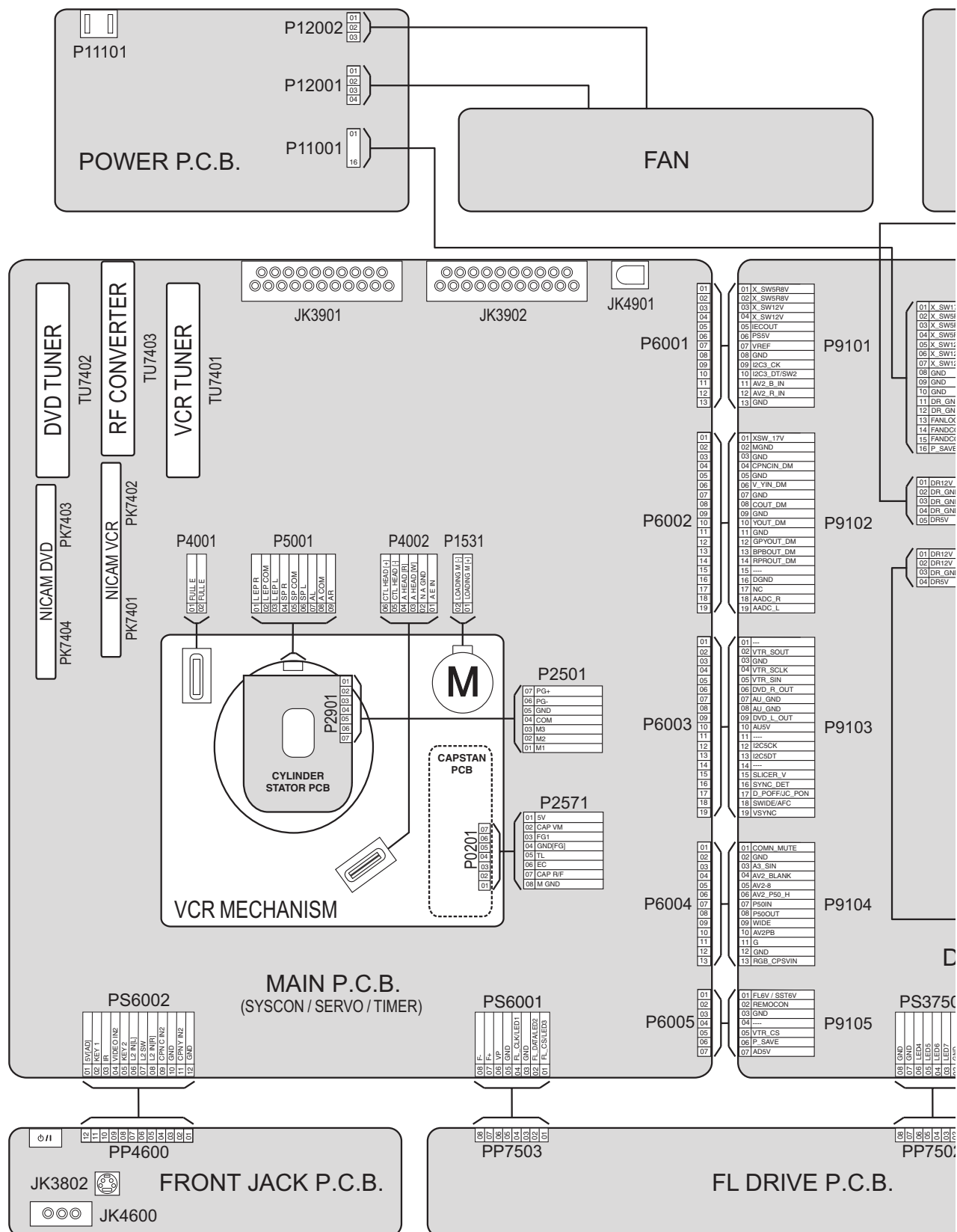
27.6. SERVICE FIXTURE AND TOOLS

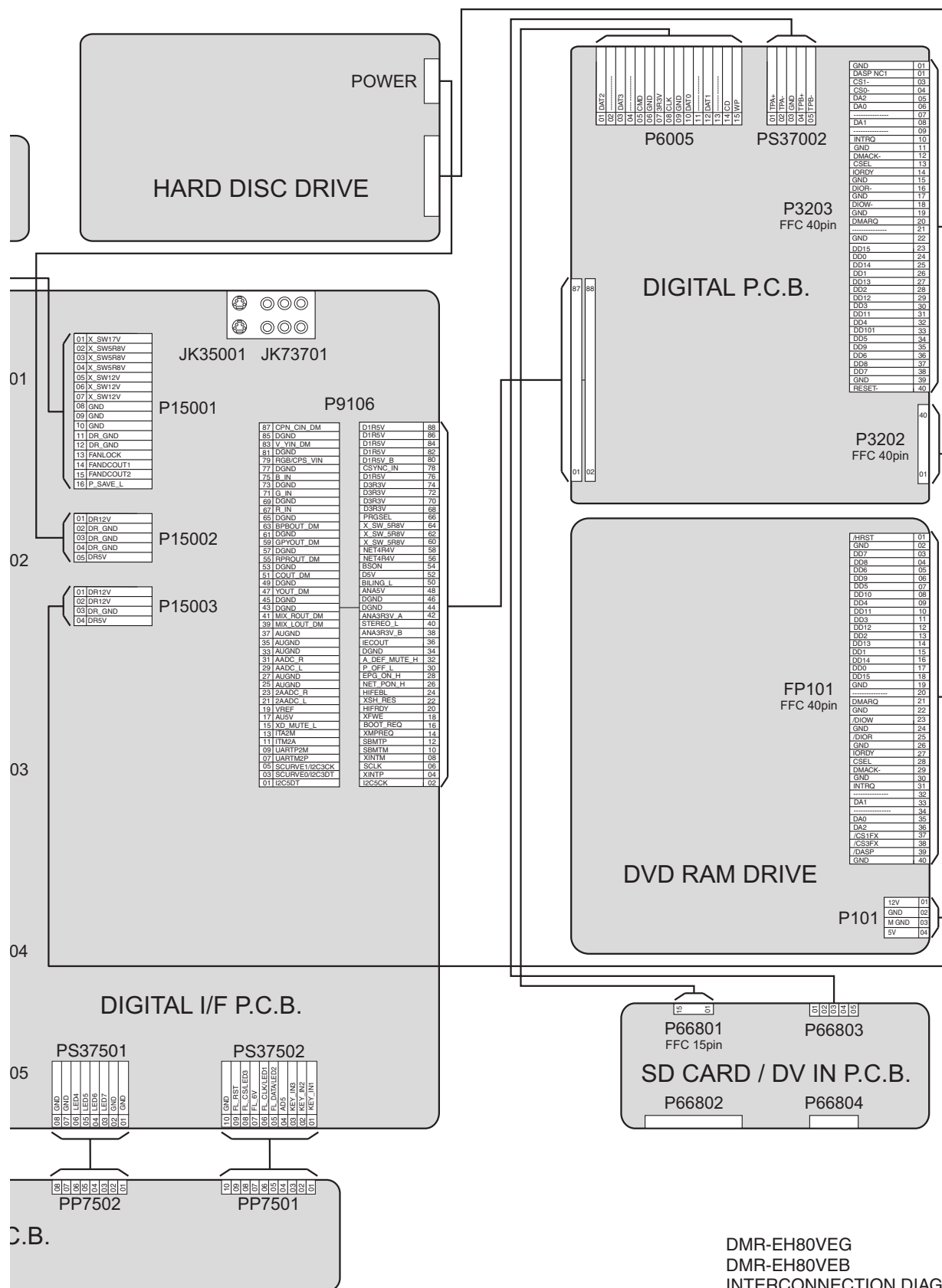
| Ref. No. | Part No. | Part Name & Description | PCS | Remarks |
|----------|------------|---|-----|--|
| | RFKZ0125 | Extension FFC (Digital P.C.B. - DVD-RAM Drive / 40 Pin) | 1 | Same as E30/HS2/E 50/ E55/ES10 series (SPC) |
| | VFK1729 | Extension Cable (Main P.C.B. - Digital I/F P.C.B. / 13 pin / 40 mm) | 2 | Same as E75V (SPC) |
| | RFKZ0240 | Extension Cable (Main P.C.B. - Digital I/F P.C.B. / 19 pin / 40 mm) | 2 | Same as E75V (SPC) |
| | RFKZ0178 | Extension Cable (Main P.C.B. - Digital I/F P.C.B. / 7 pin / 40 mm) | 1 | Same as E75V (SPC) |
| | RFKZ0215 | Extension Cable (Main P.C.B. - Front Jack P.C.B. / 12 Pin) | 1 | Same as DMR- E55/E75V series (SPC) |
| | RFKZ0238 | Extension Cable (Main P.C.B. / Digital I/F P.C.B. - FL Drive P.C.B. / 8 Pin) | 1 | Same as E75V (SPC) |
| | RFKZ0239 | Extension Cable (Digital I/F P.C.B. - FL Drive P.C.B. / 10 Pin) | 1 | Same as E75V (SPC) |
| | | | | |
| | for VHS | | | |
| | VFJ8125H3F | PAL VHS Alignment Tape | 1 | Same as E75V (SPC) |
| | VFK0329 | Post Adjustment Screwdriver | 1 | Same as E75V (SPC) |
| | VFK0330 | Fine Adjustment Gear Driver | 1 | Same as E75V (SPC) |

28 DIAGRAMS FOR PRINTING A4 SIZE

28.1. BLOCK DIAGRAM FOR PRINTING A4 SIZE

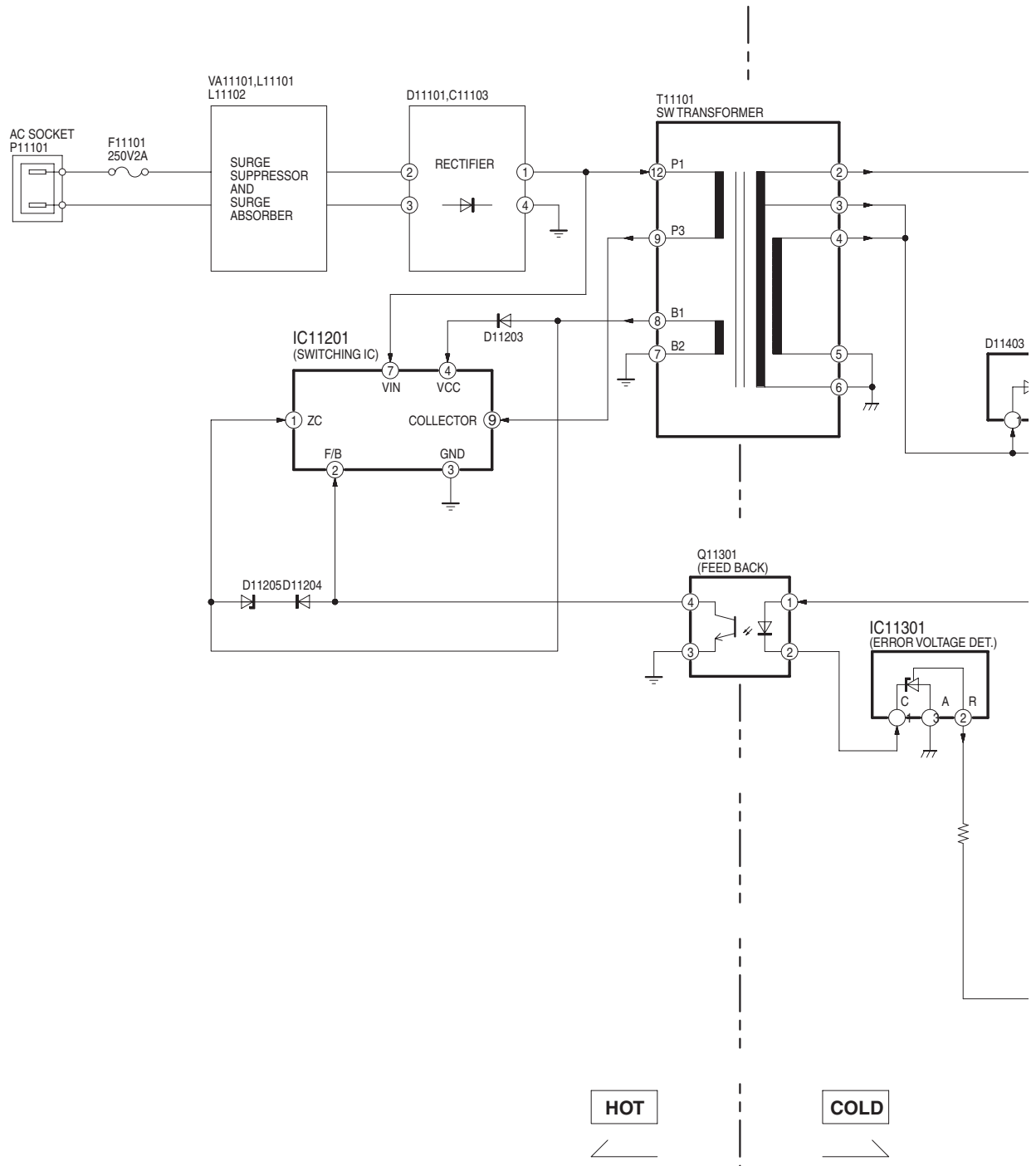
22 INTERCONNECTION DIAGRAM

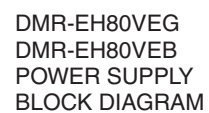




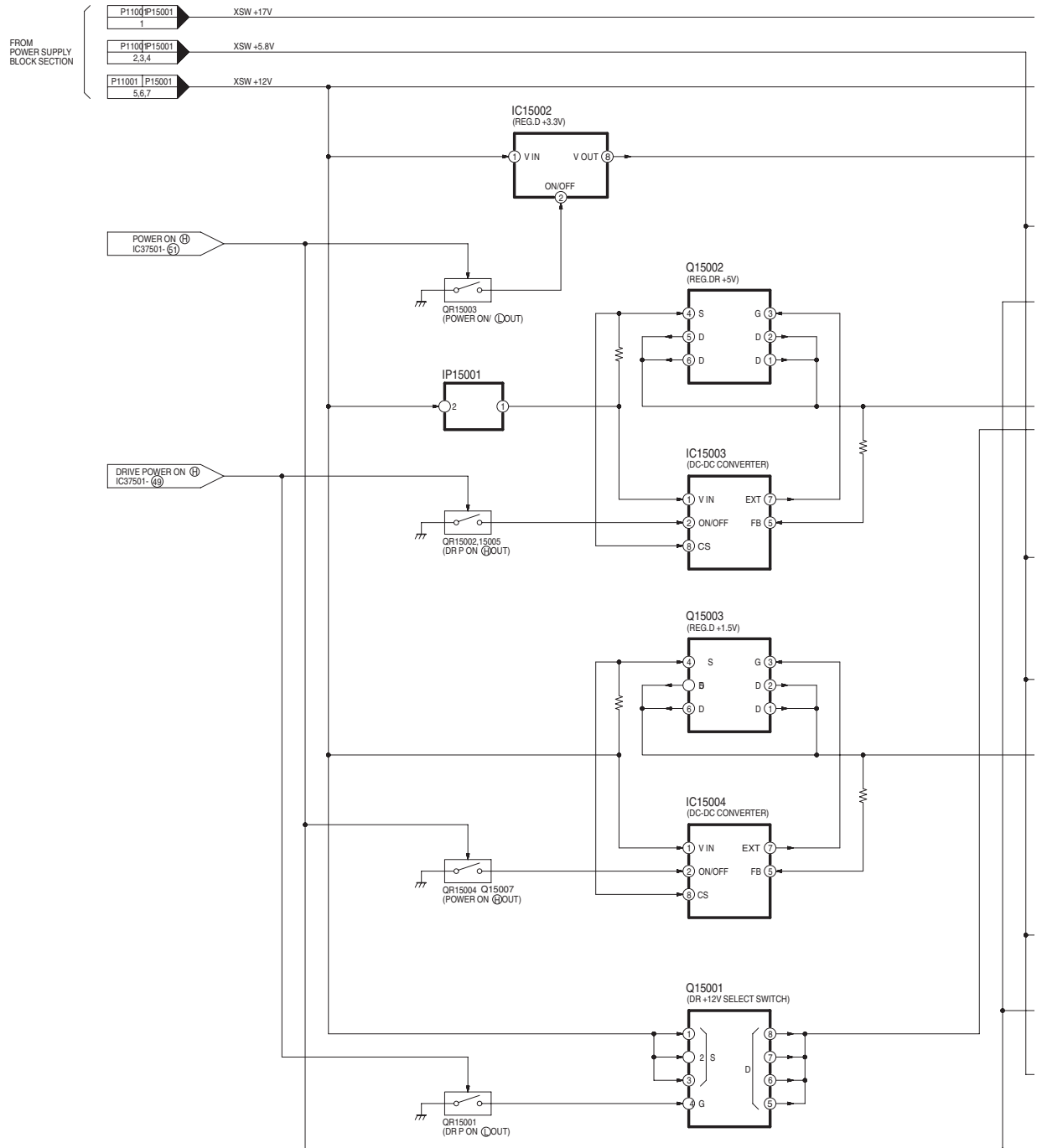
23 BLOCK DIAGRAM

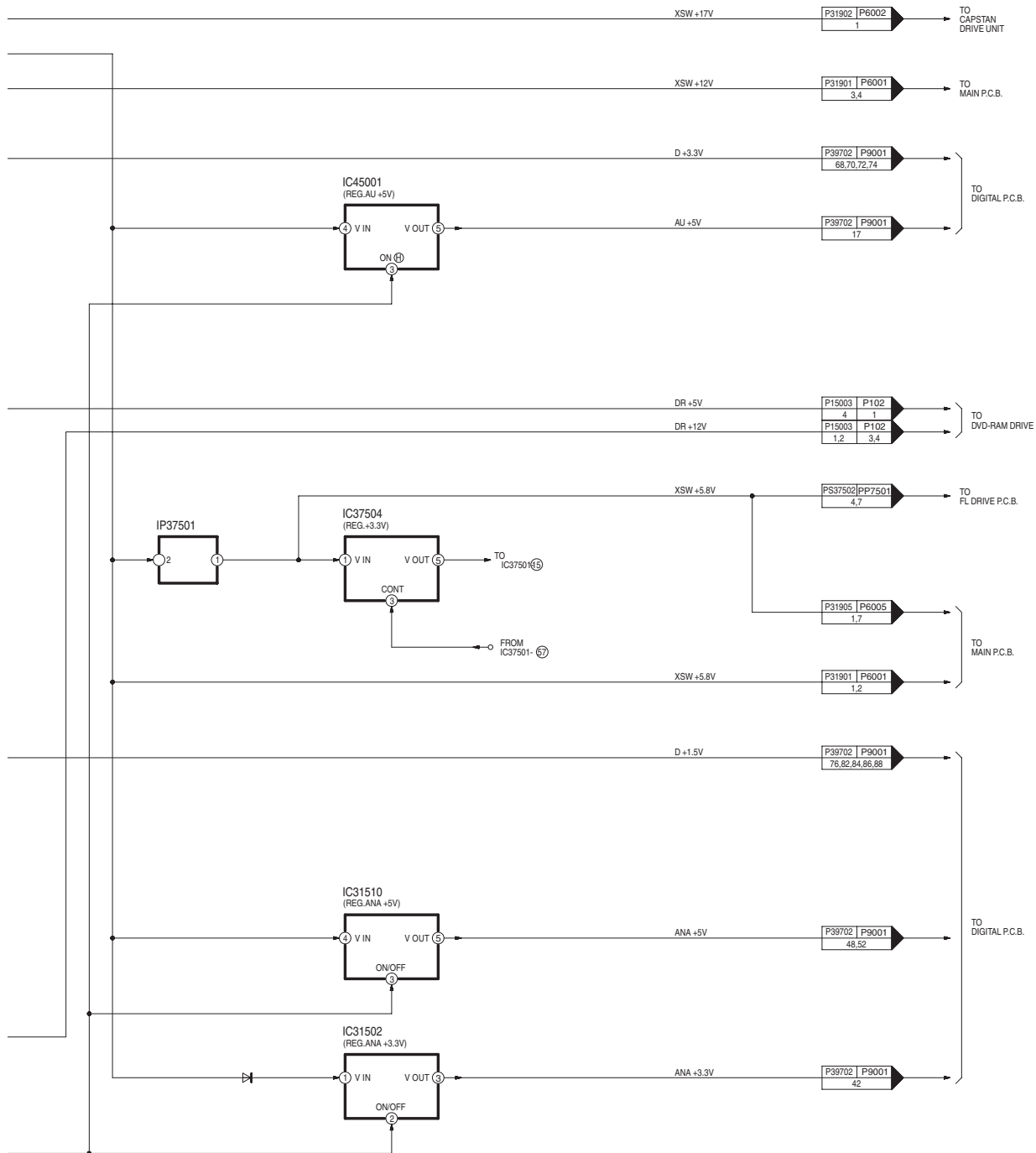
23.1. POWER SUPPLY BLOCK DIAGRAM





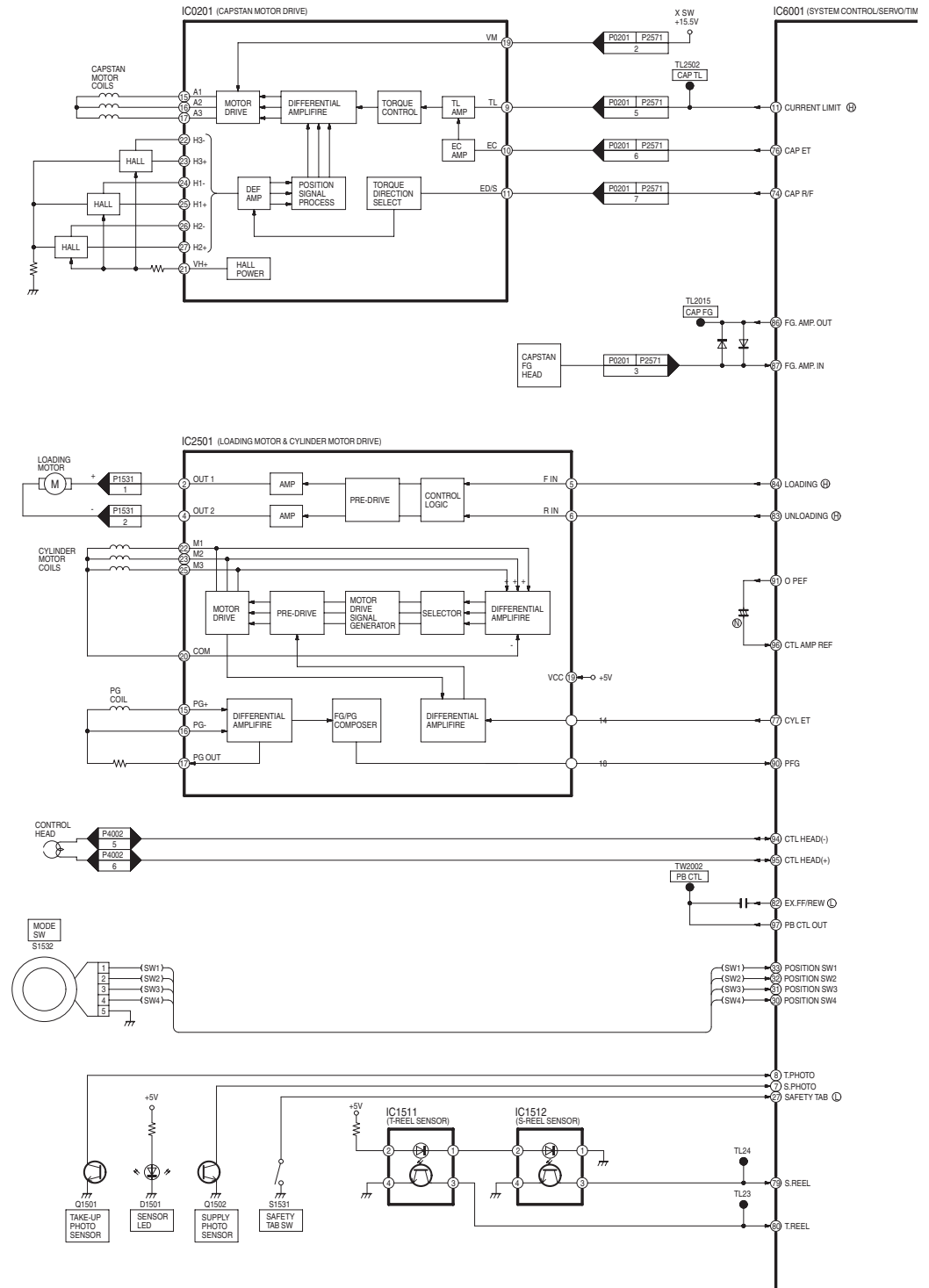
23.2. DIGITAL I/F REGULATOR BLOCK DIAGRAM

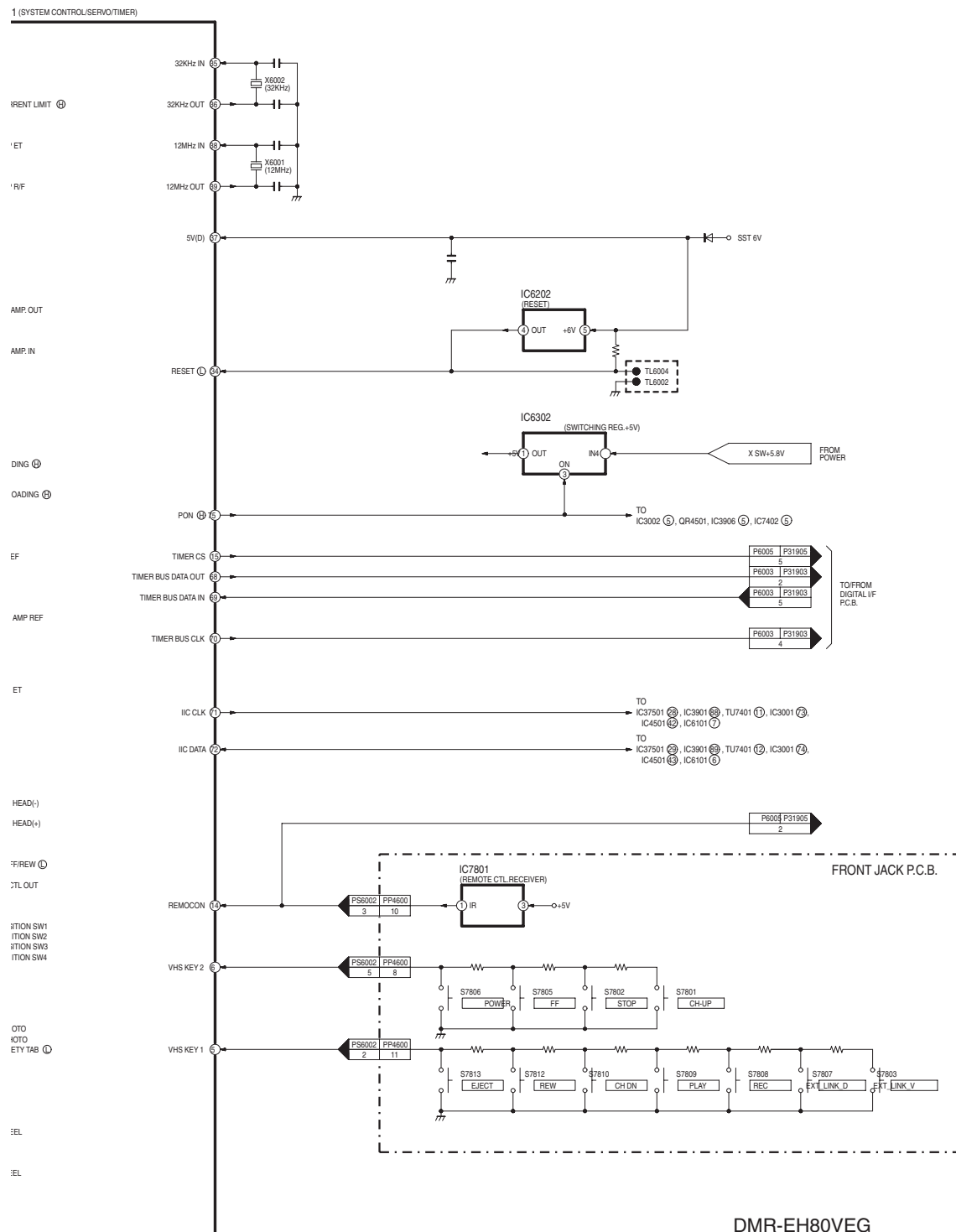




DMR-EH80VEG
DMR-EH80VEB
DIGITAL I/F REGULATOR
BLOCK DIAGRAM

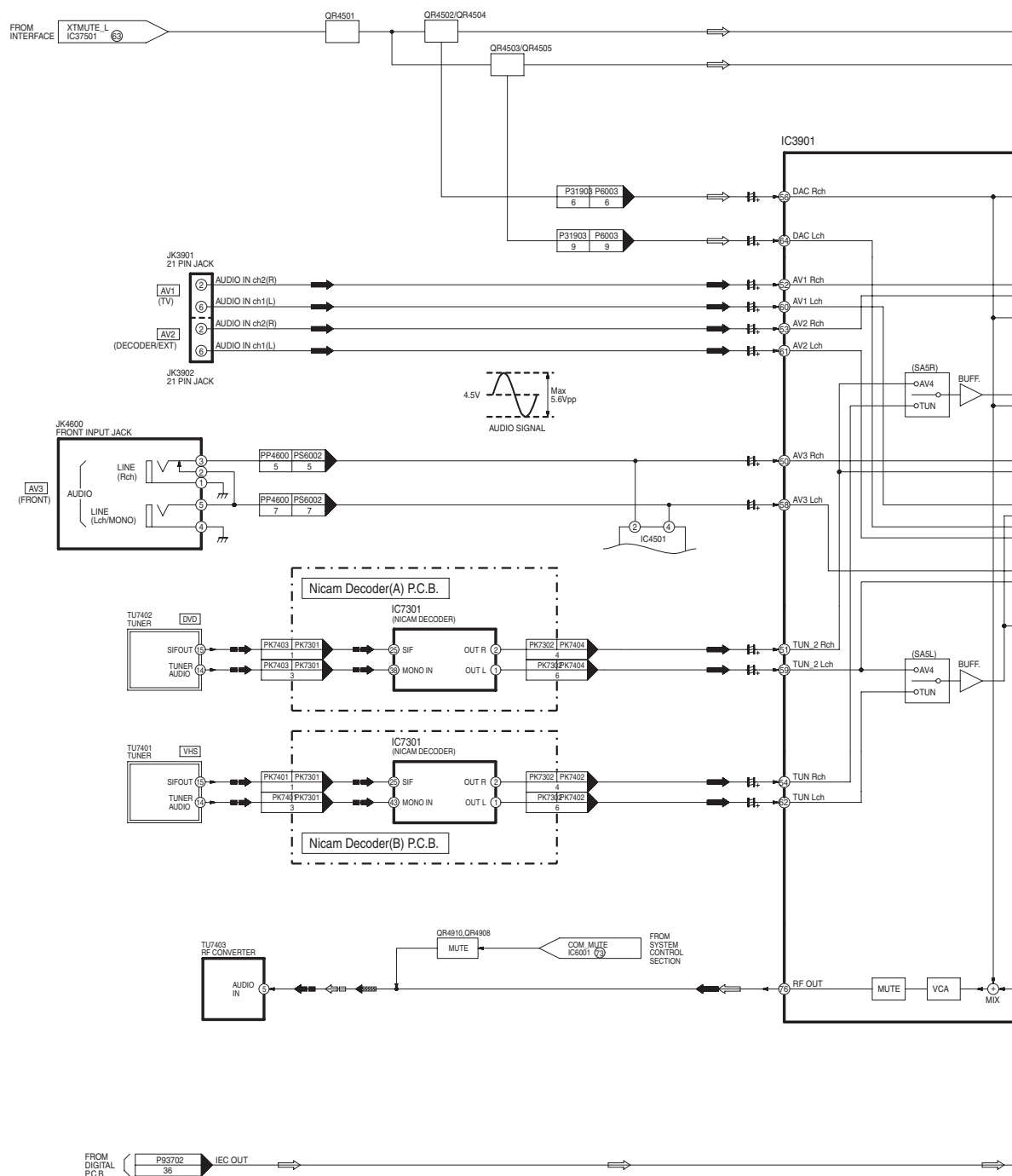
23.3. SYSTEM CONTROL, SERVO & TIMER BLOCK DIAGRAM

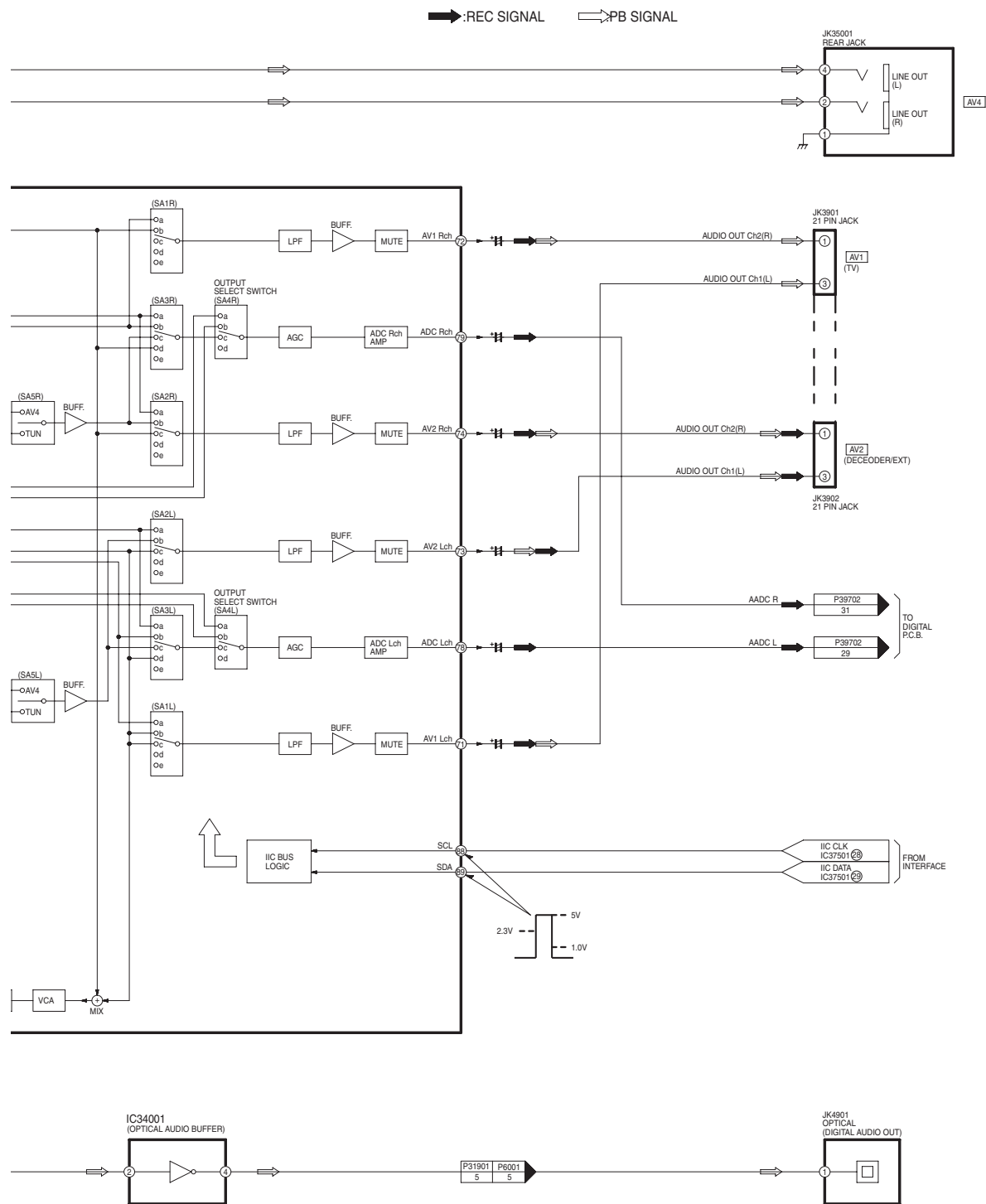




DMR-EH80VEG
DMR-EH80VEB
SYSTEM CONTROL / SERVO & TIMER
BLOCK DIAGRAM

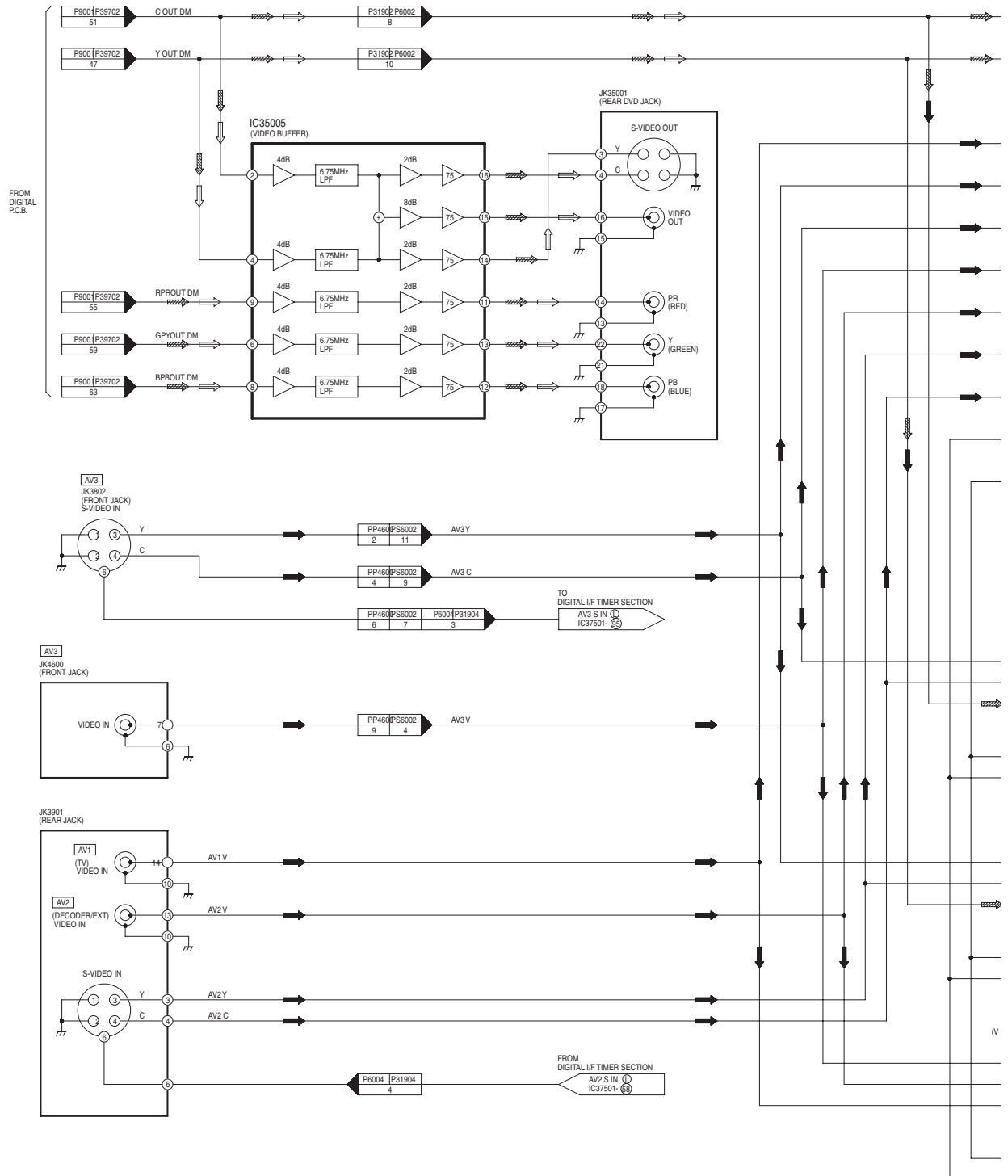
23.4. AUDIO BLOCK DIAGRAM

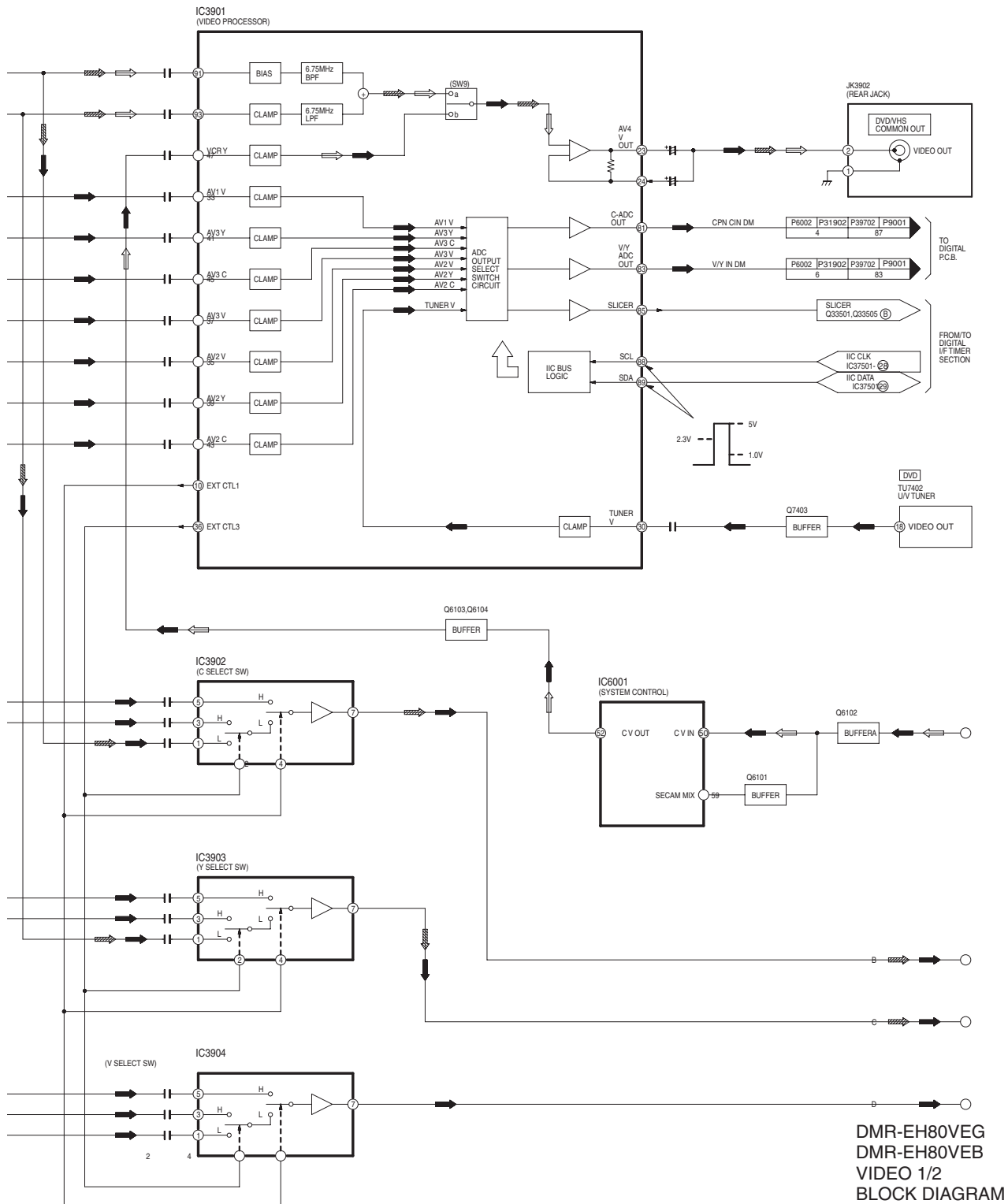




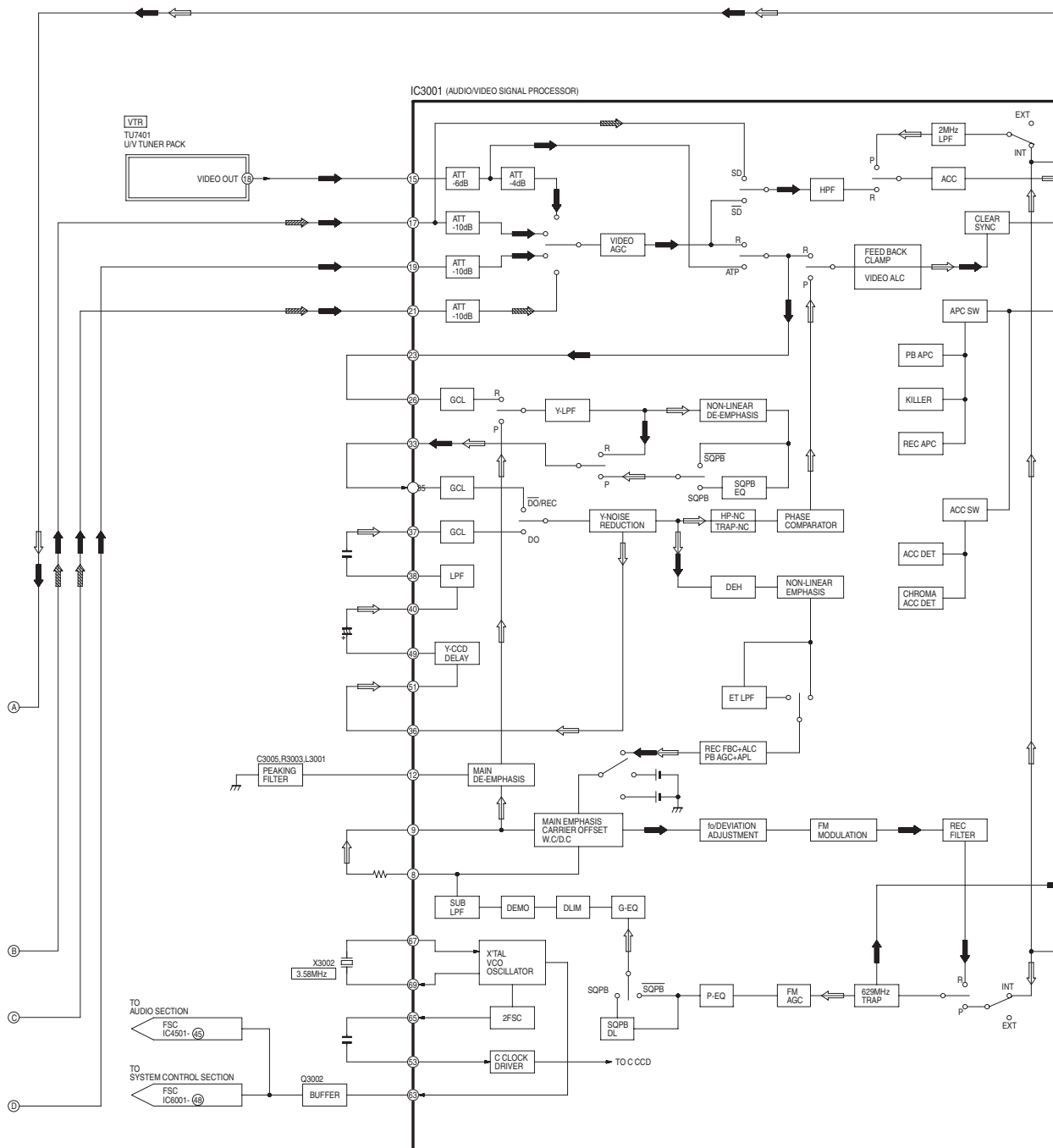
DMR-EH80VEG
DMR-EH80VEB
AUDIO
BLOCK DIAGRAM

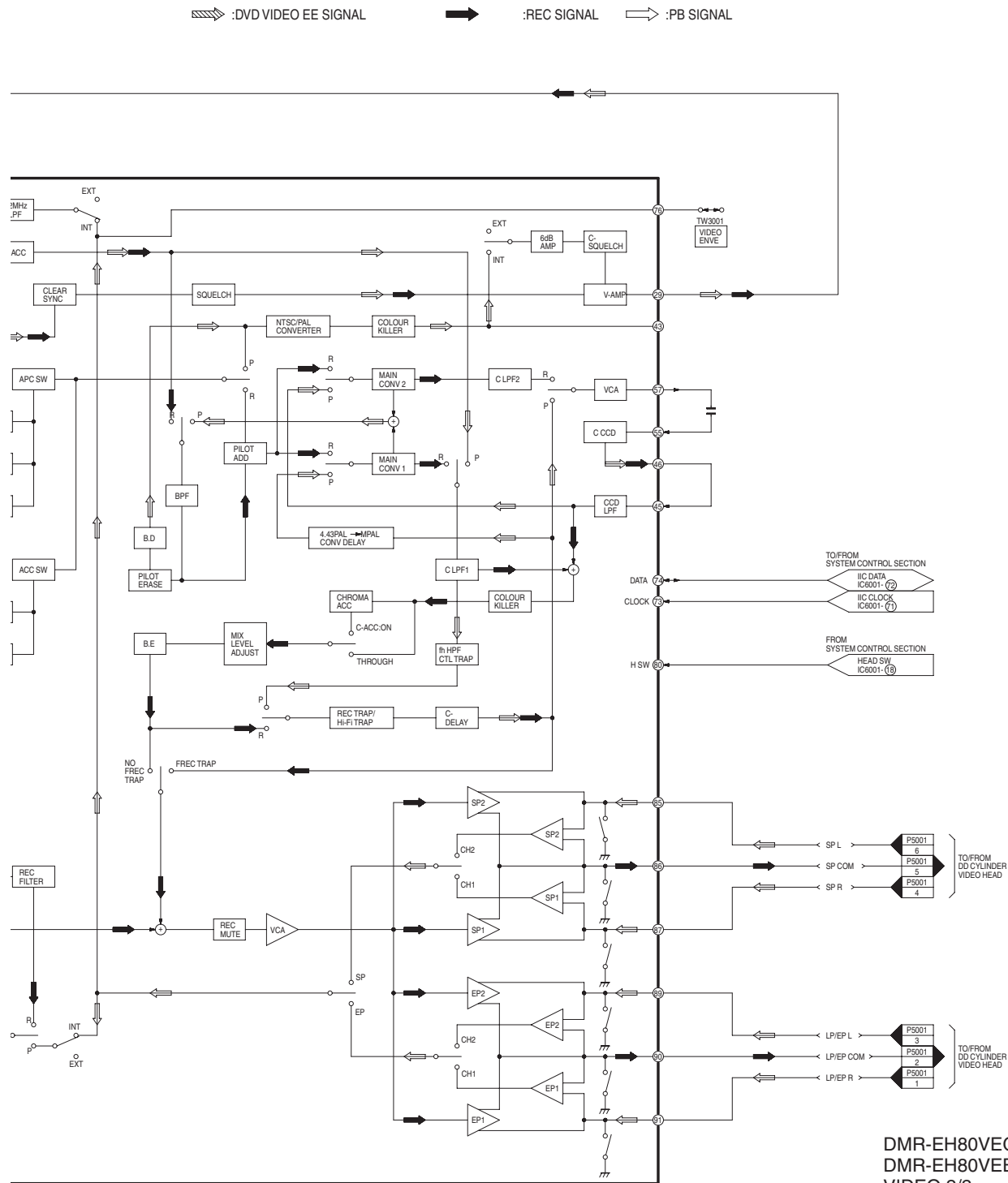
23.5. VIDEO BLOCK DIAGRAM



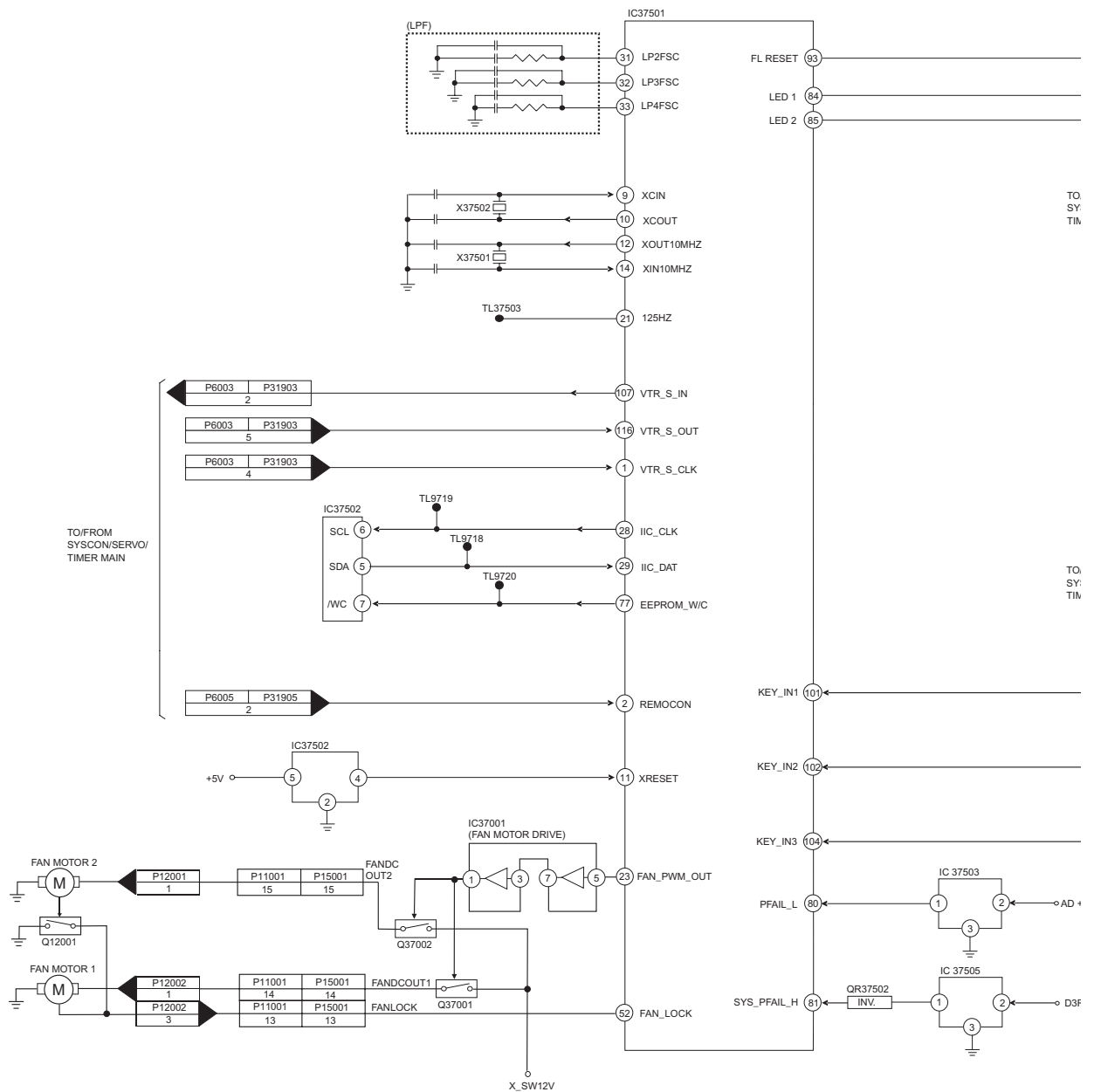


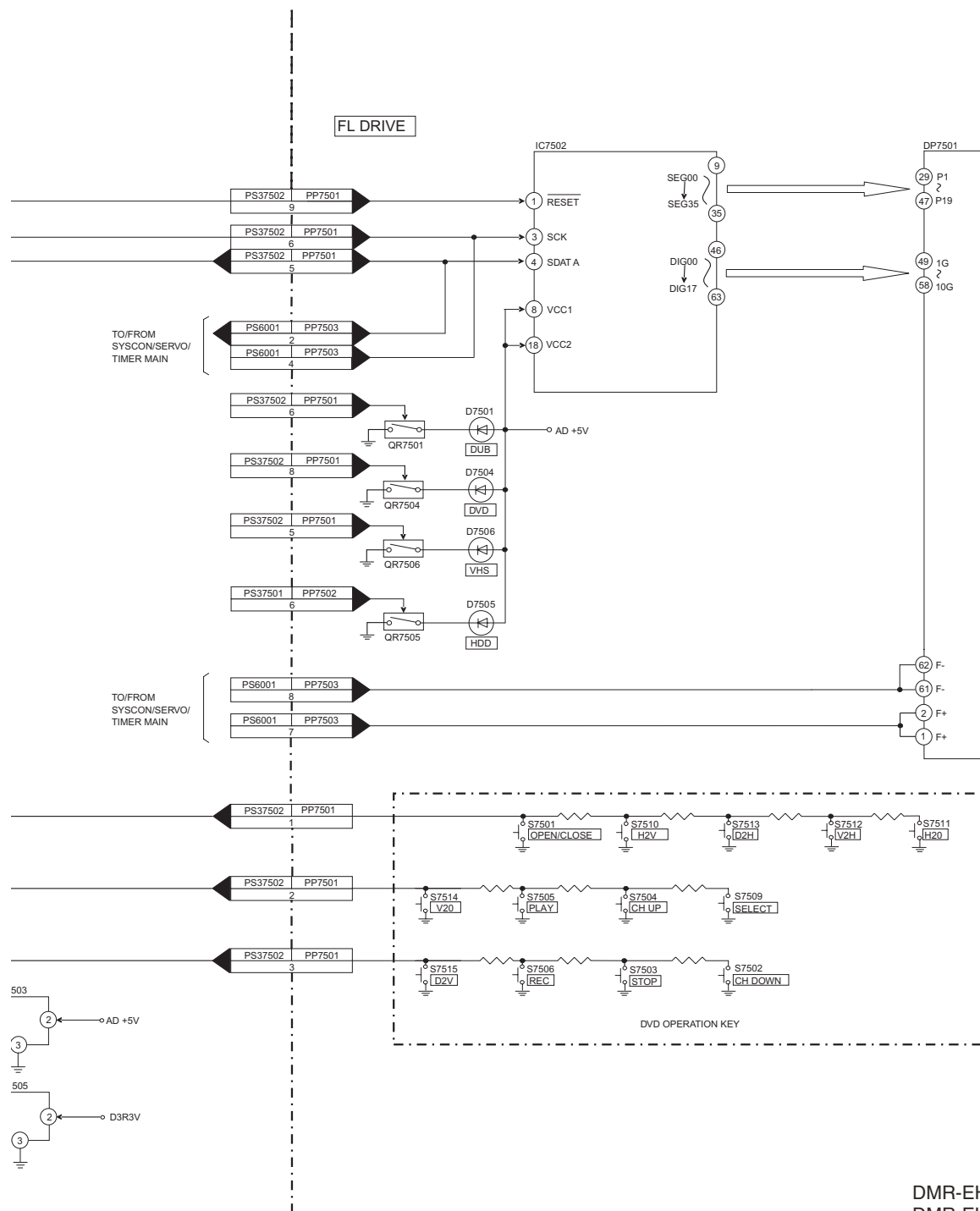
DMR-EH80VEG
DMR-EH80VEB
VIDEO 1/2
BLOCK DIAGRAM





23.6. DIGITAL I/F P.C.B. BLOCK DIAGRAM



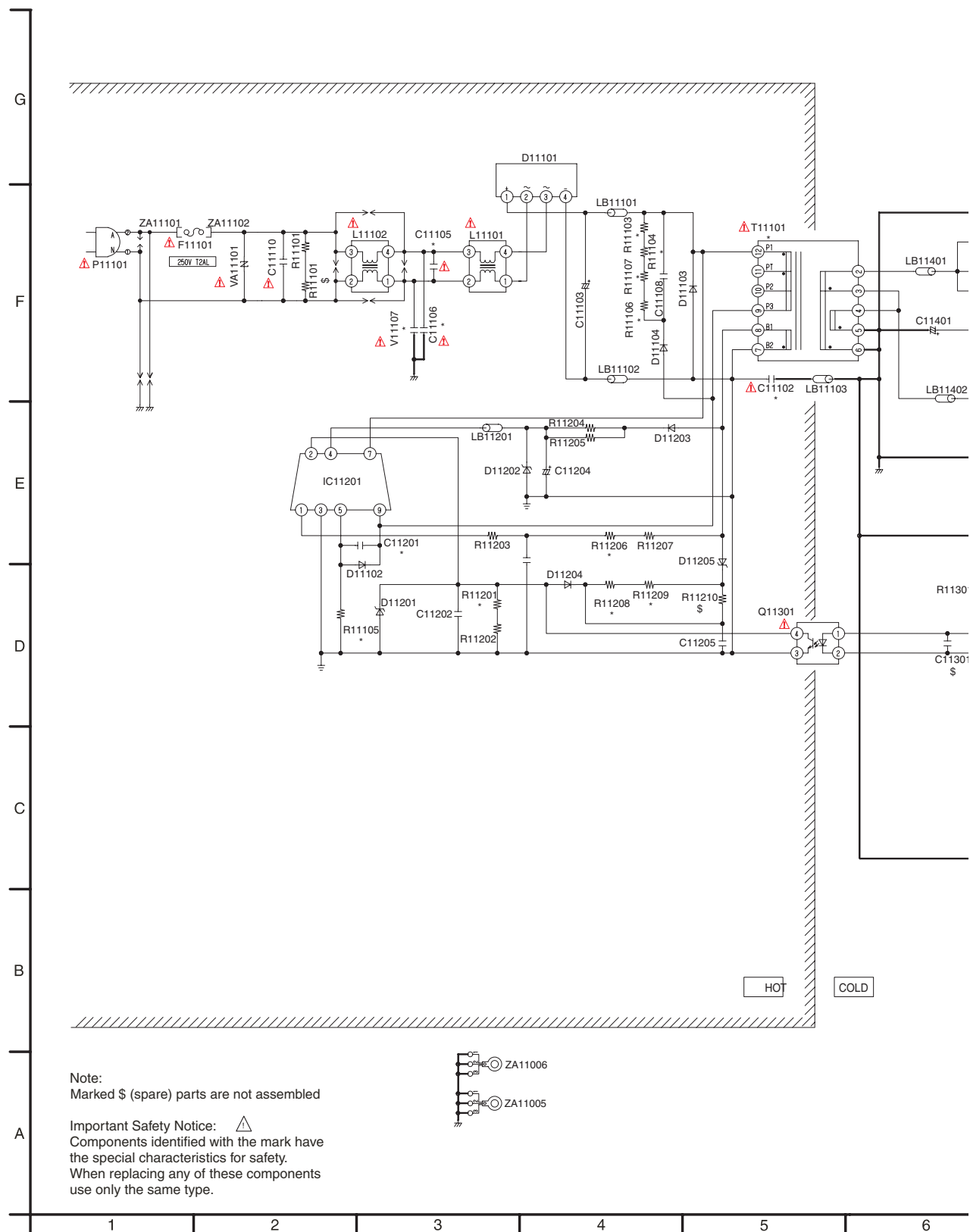


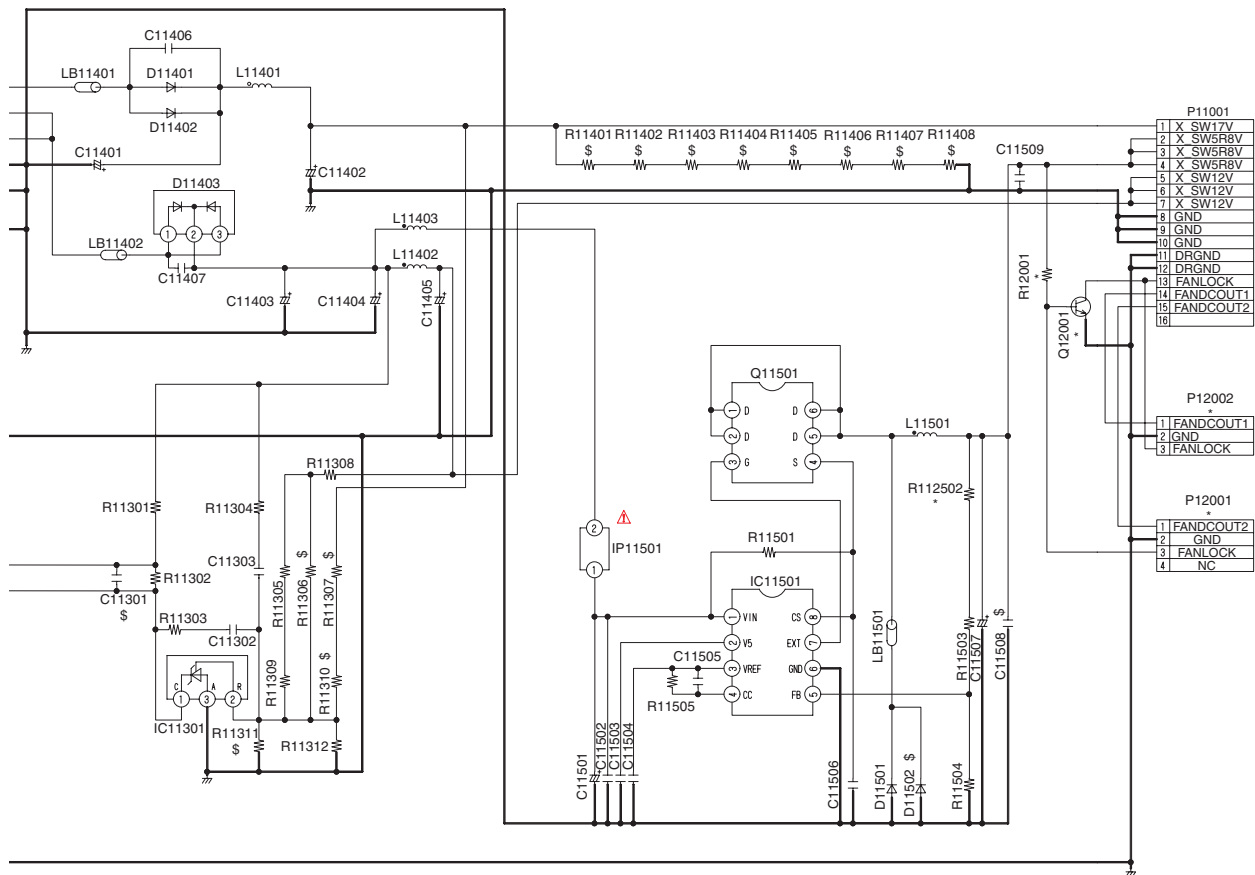
DMR-EH80VEG
DMR-EH80VEB
DIGITAL I/F PCB
BLOCK DIAGRAM

28.2. SCHEMATIC DIAGRAM FOR PRINTING A4 SIZE

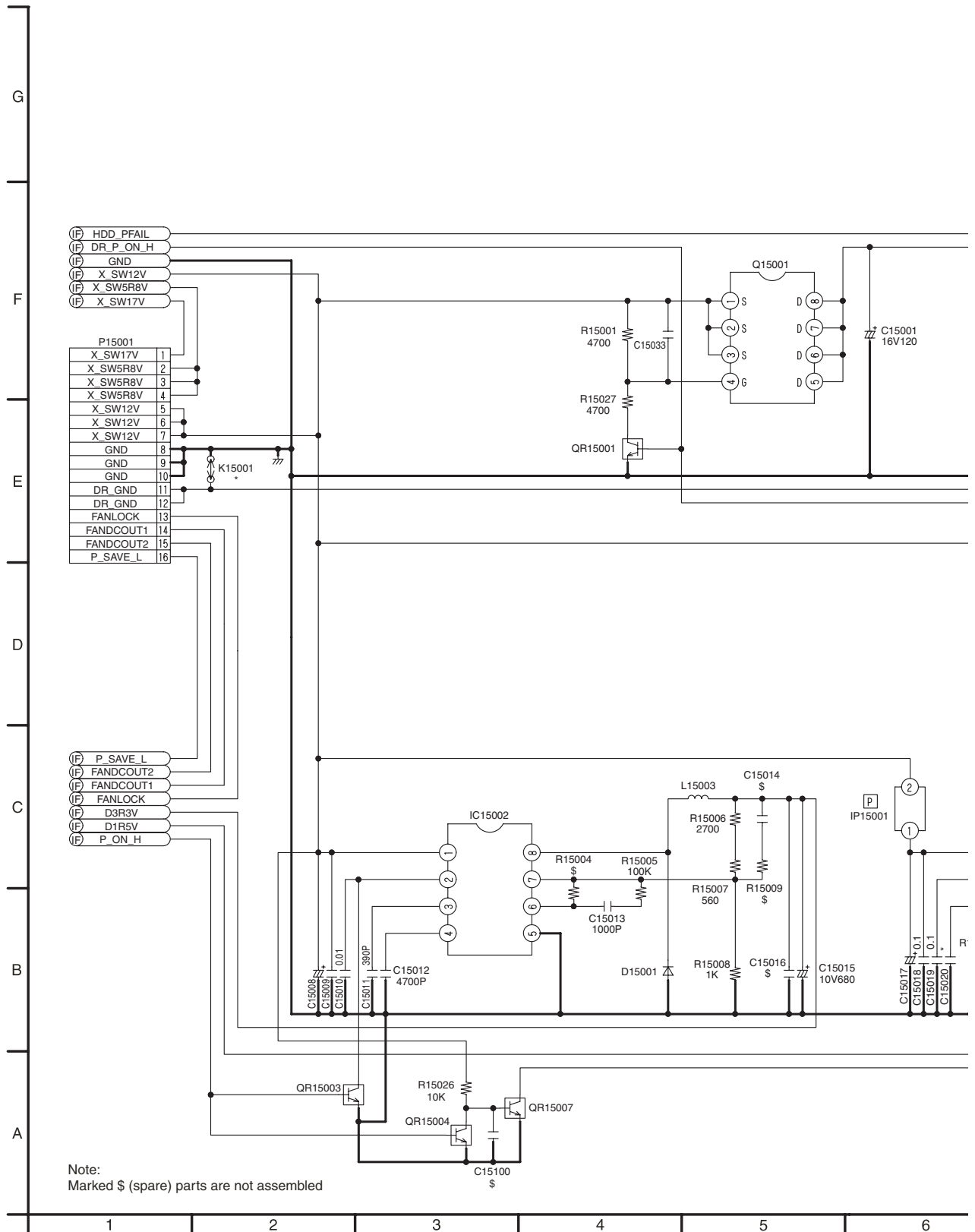
24 SCHEMATIC DIAGRAM

24.1. POWER SUPPLY





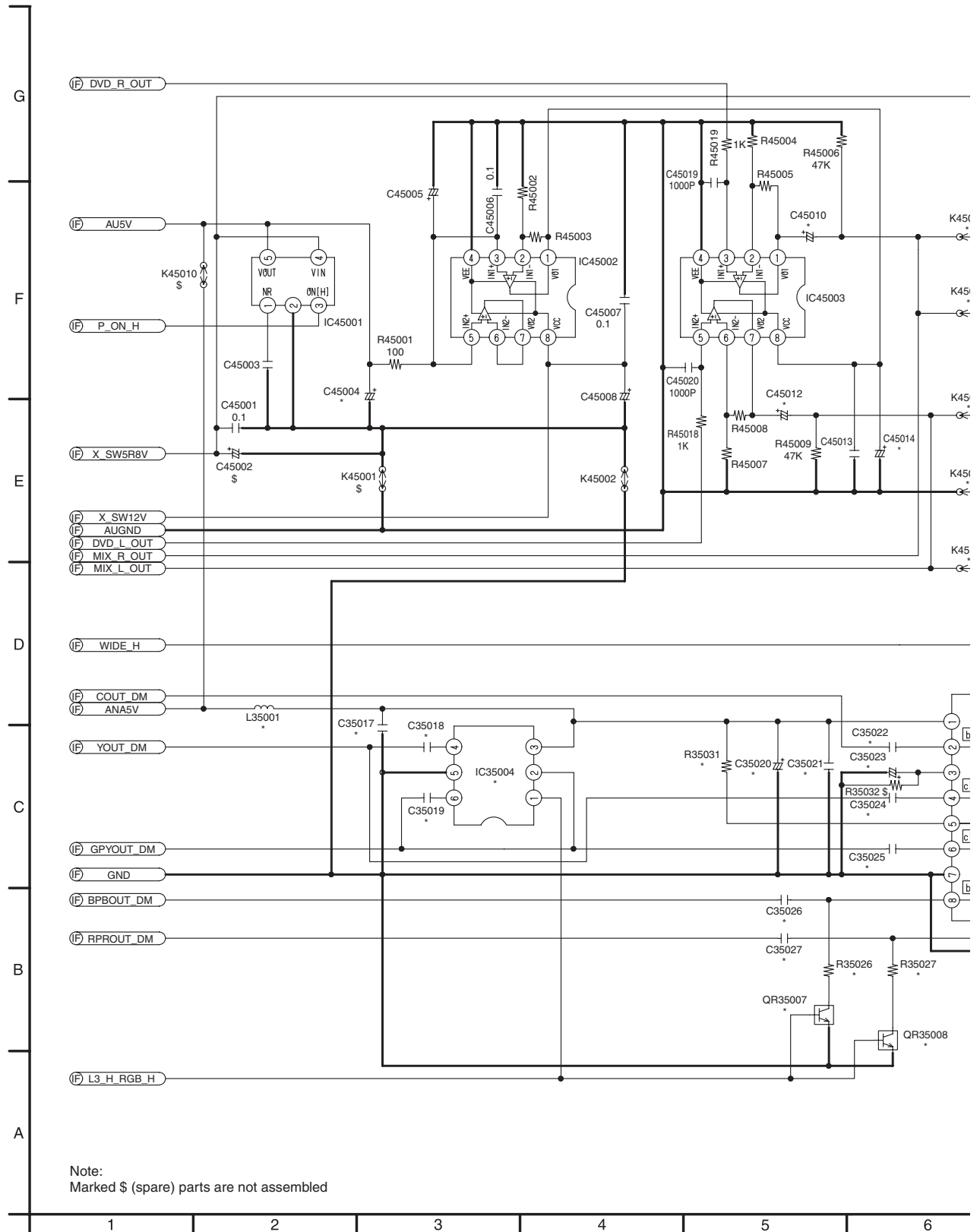
DMR-EH80VEG
DMR-EH80VEB
POWER 1/2
SCHEMATIC DIAGRAM

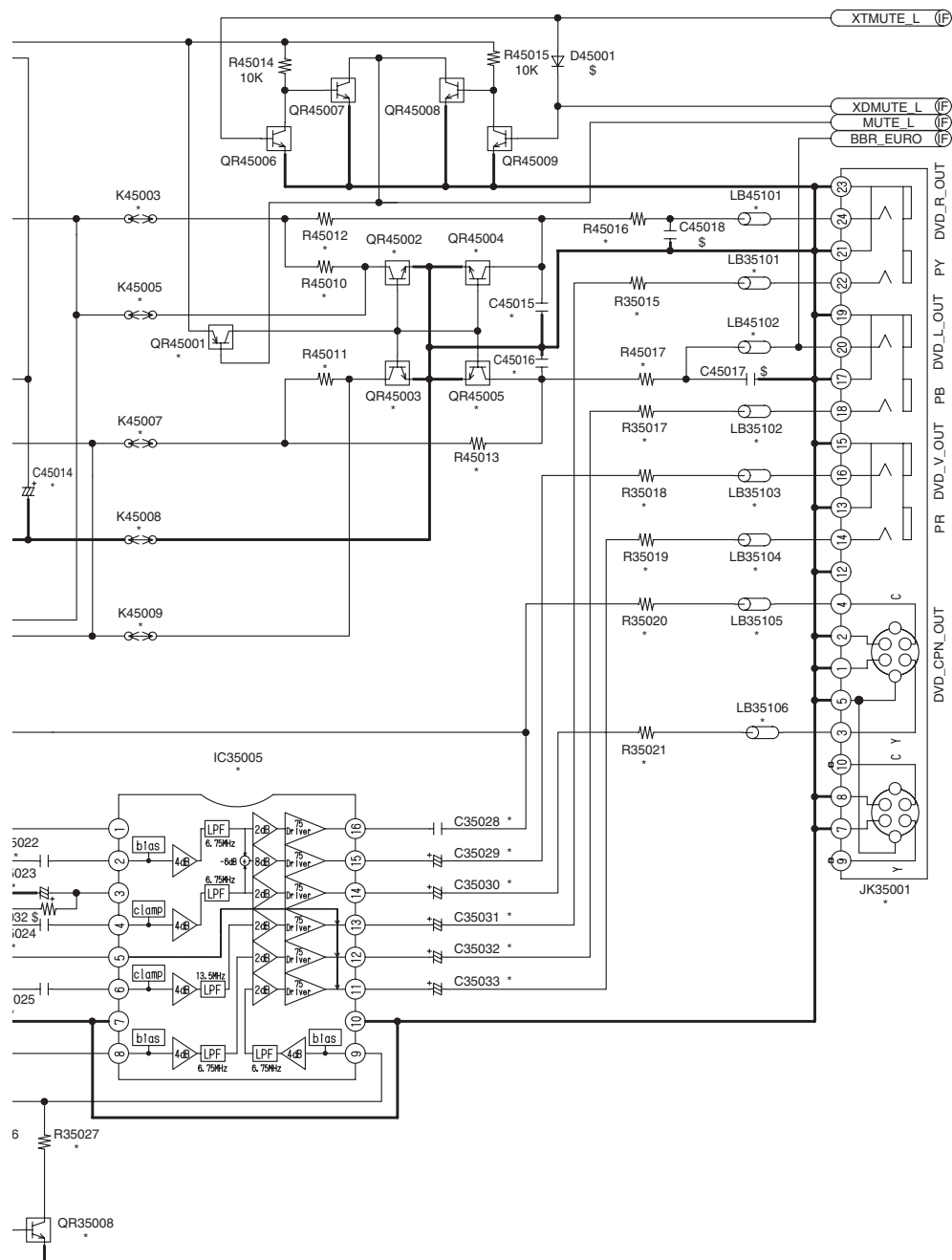




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24.2. DVD OUTPUT





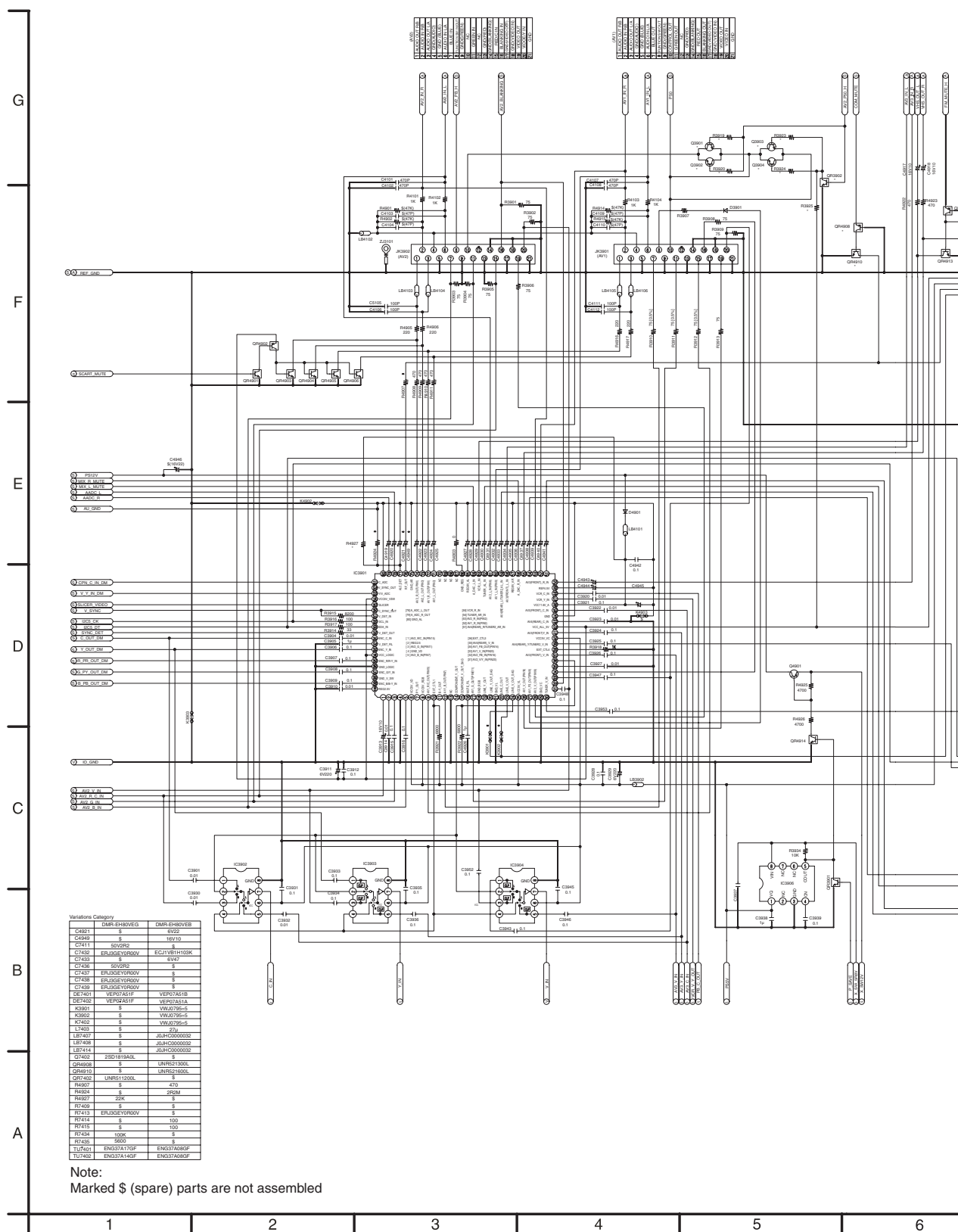
DMR-EH80VEG
DMR-EH80VEB
DVD OUTPUT
SCHEMATIC DIAGRAM

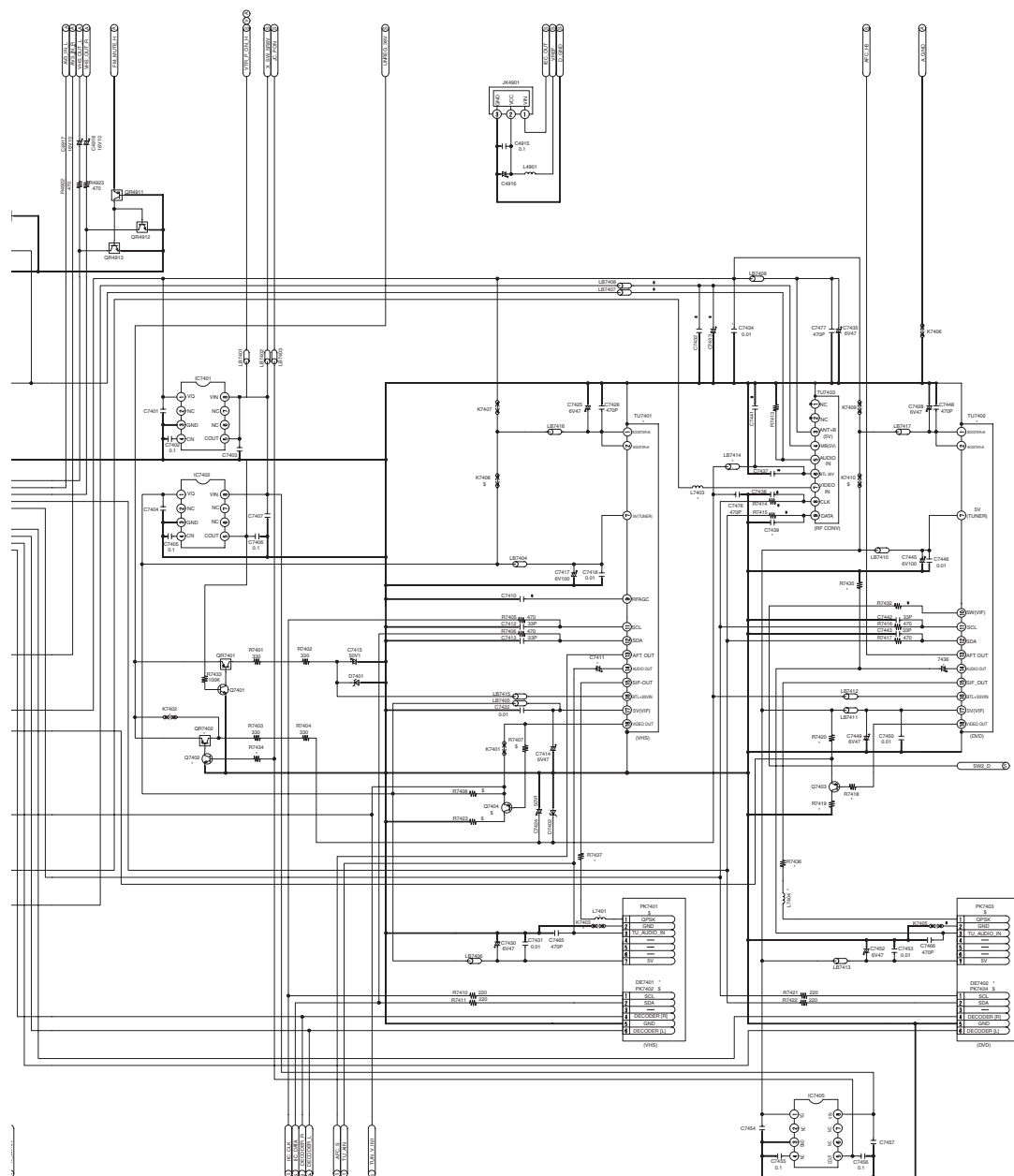


Important Safety Notice: 
Components identified with the mark have
the special characteristics for safety.
When replacing any of these components
use only the same type.

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24.4. IO / TUNER






DMR-EH80VEG
DMR-EH80VEB
IO / TUNER
SCHEMATIC DIAGRAM

C



| Variations Category | | |
|---------------------|-------------|-------------|
| | DMR-EH80VEG | DMR-EH80VEB |
| C6114 | 33P | \$ |
| L6104 | 33μ | \$ |
| Q6101 | 2SB1218AOL | \$ |
| R6116 | 1500 | \$ |
| R6118 | \$ | 47K |

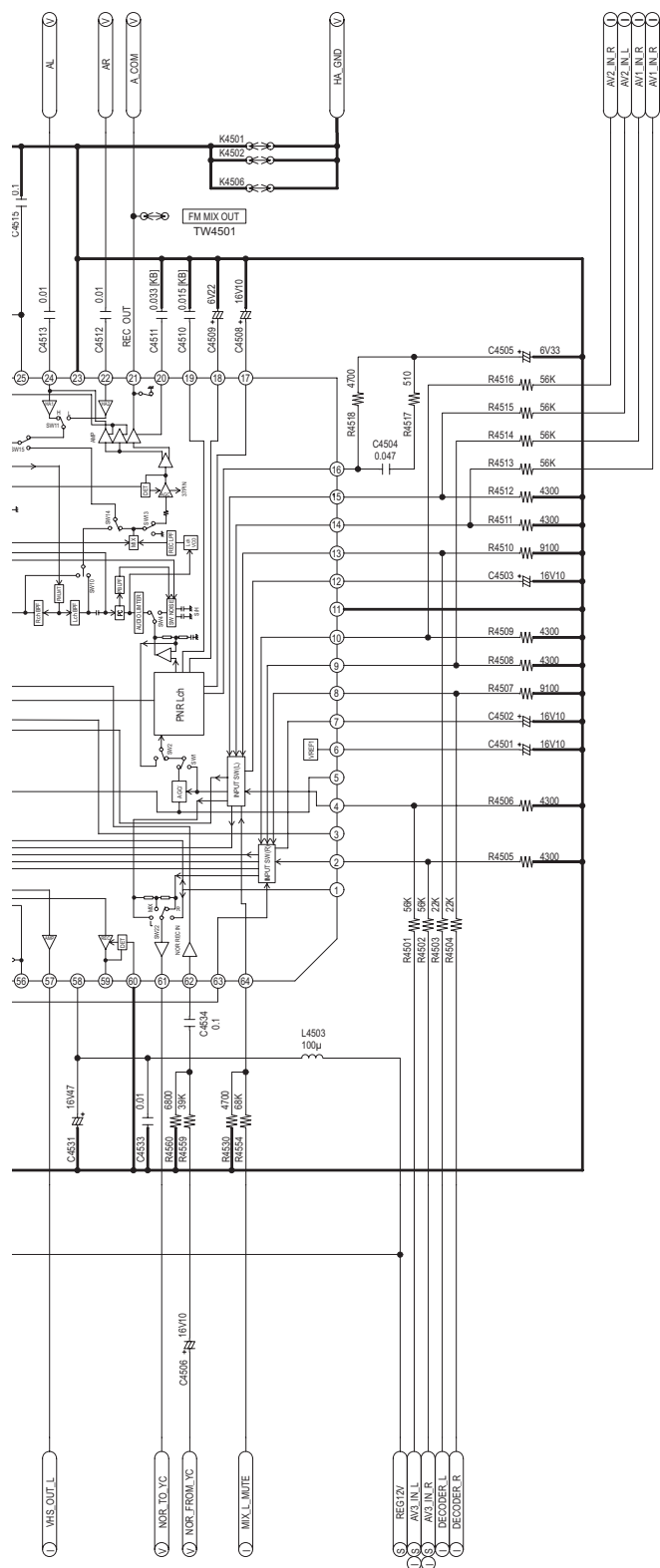
Note:
Marked \$ (spare) parts are not assembled
Important Safety Notice: 
Components identified with the mark have
the special characteristics for safety.
When replacing any of these components
use only the same type.



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A vertical number line with tick marks labeled A, B, C, D, E, F, and G from bottom to top.





G

F

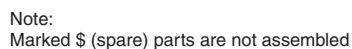
E

D

C

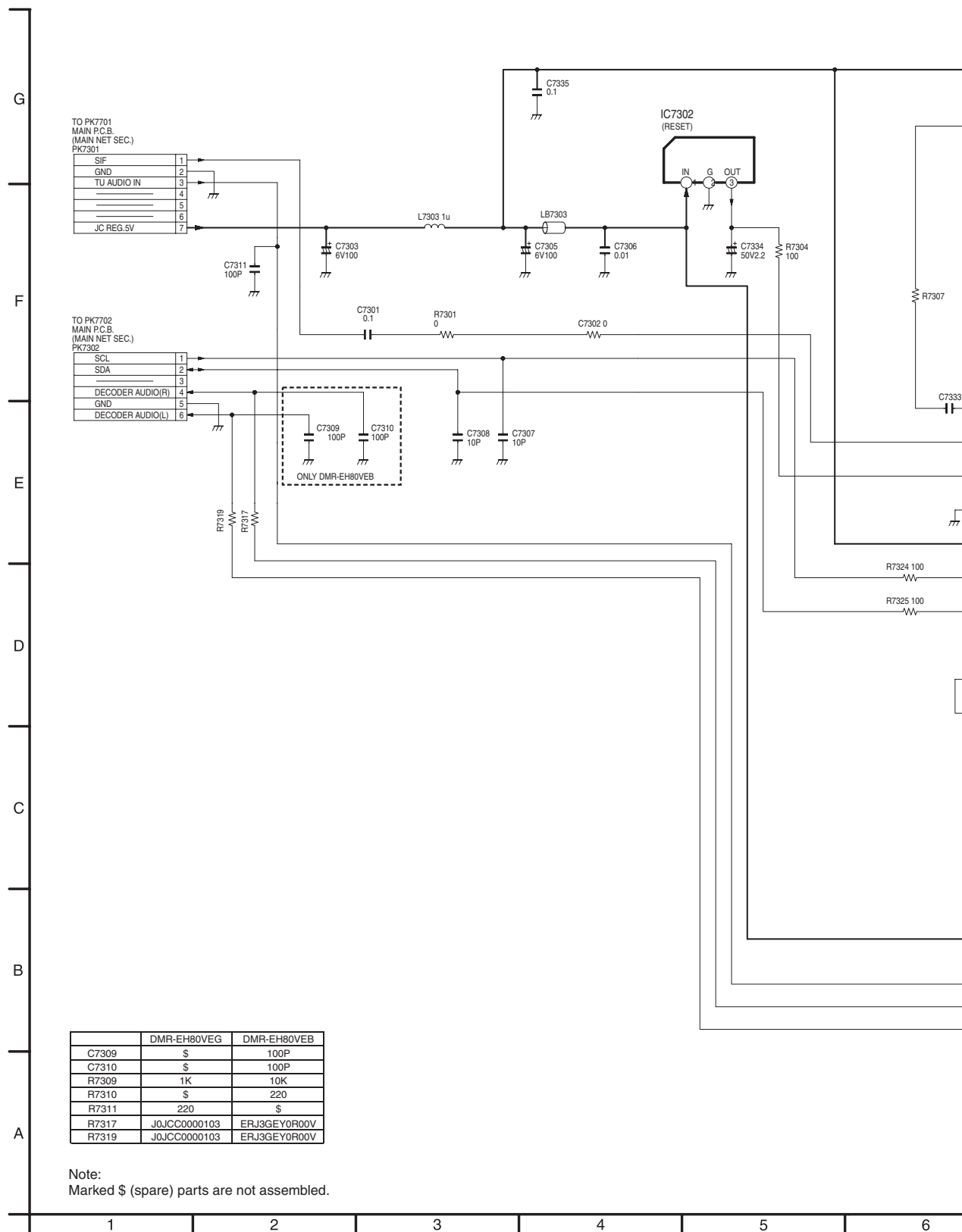
B

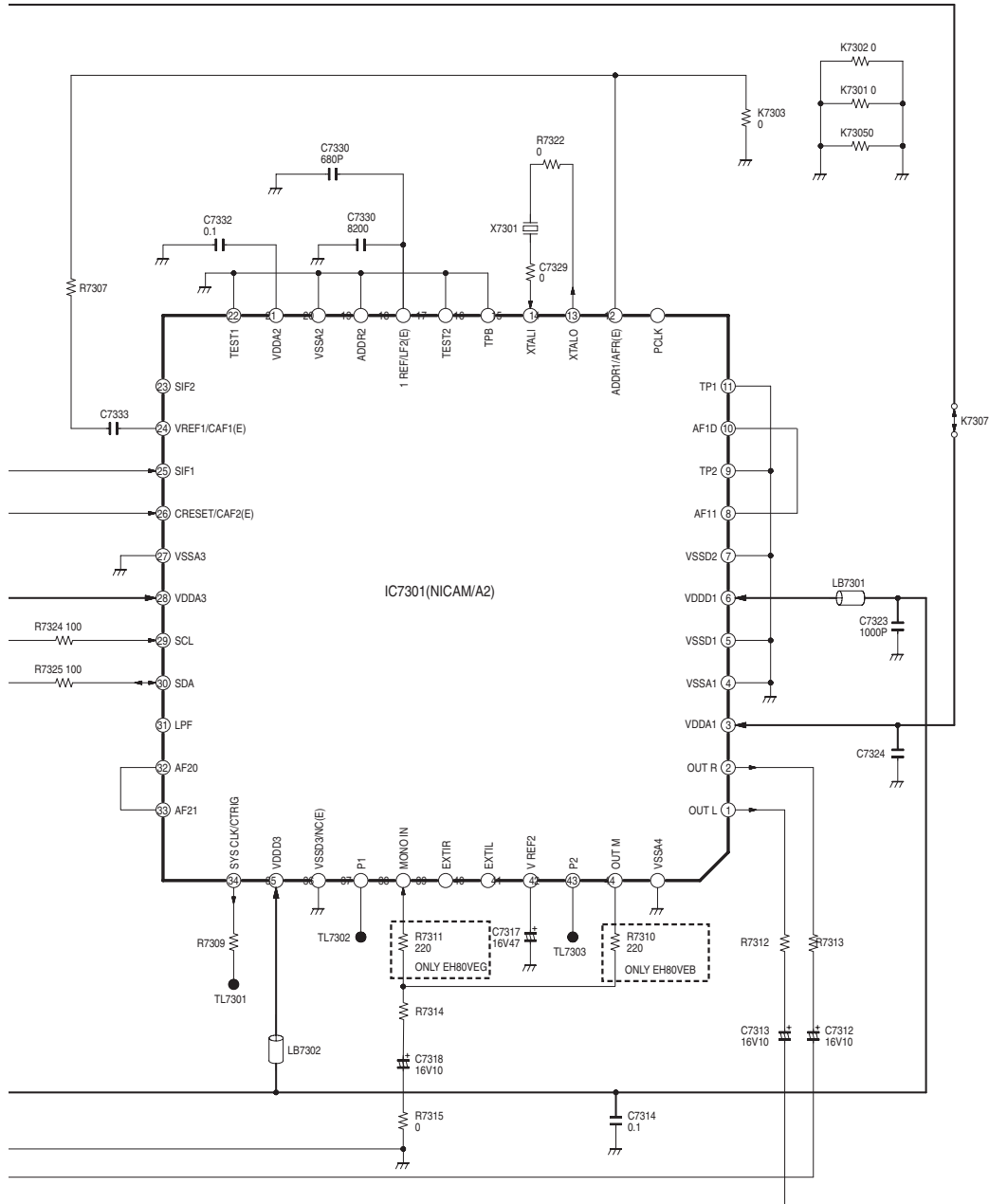
A





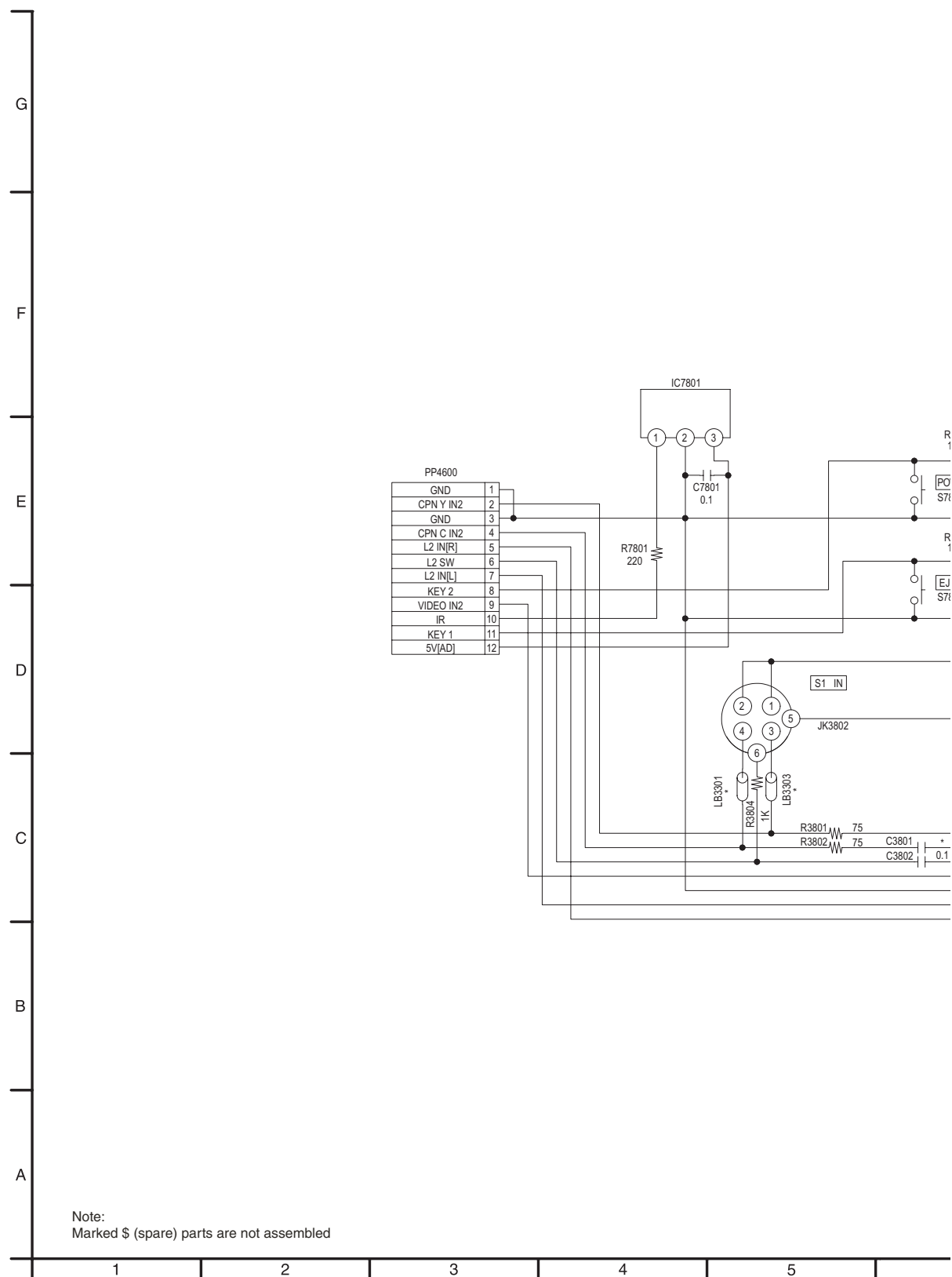
24.8. NICAM DECODER

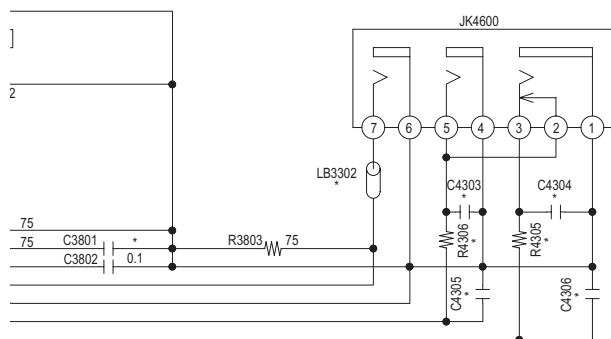
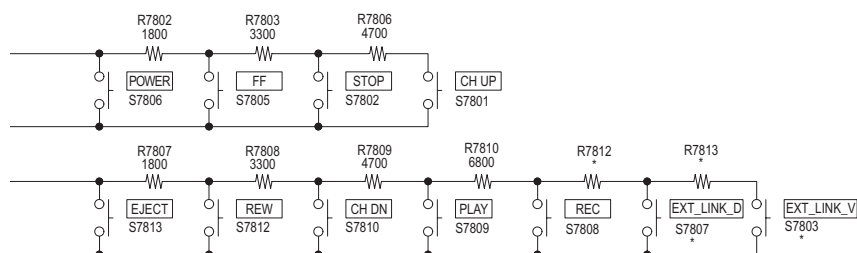




DMR-EH80VEG
DMR-EH80VEB
NICAM DECODER
SCHEMATIC DIAGRAM

24.9. FRONT JACK

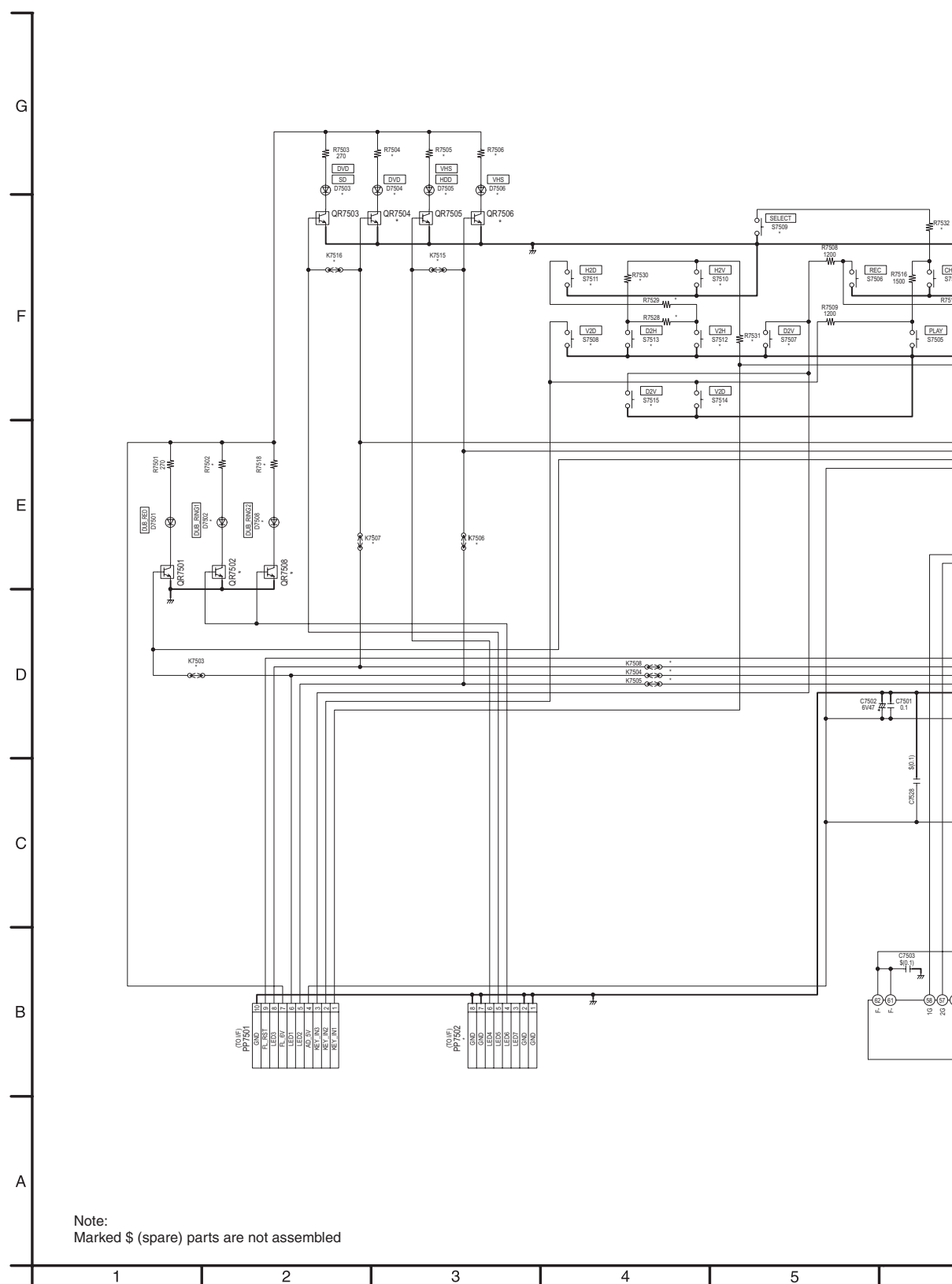


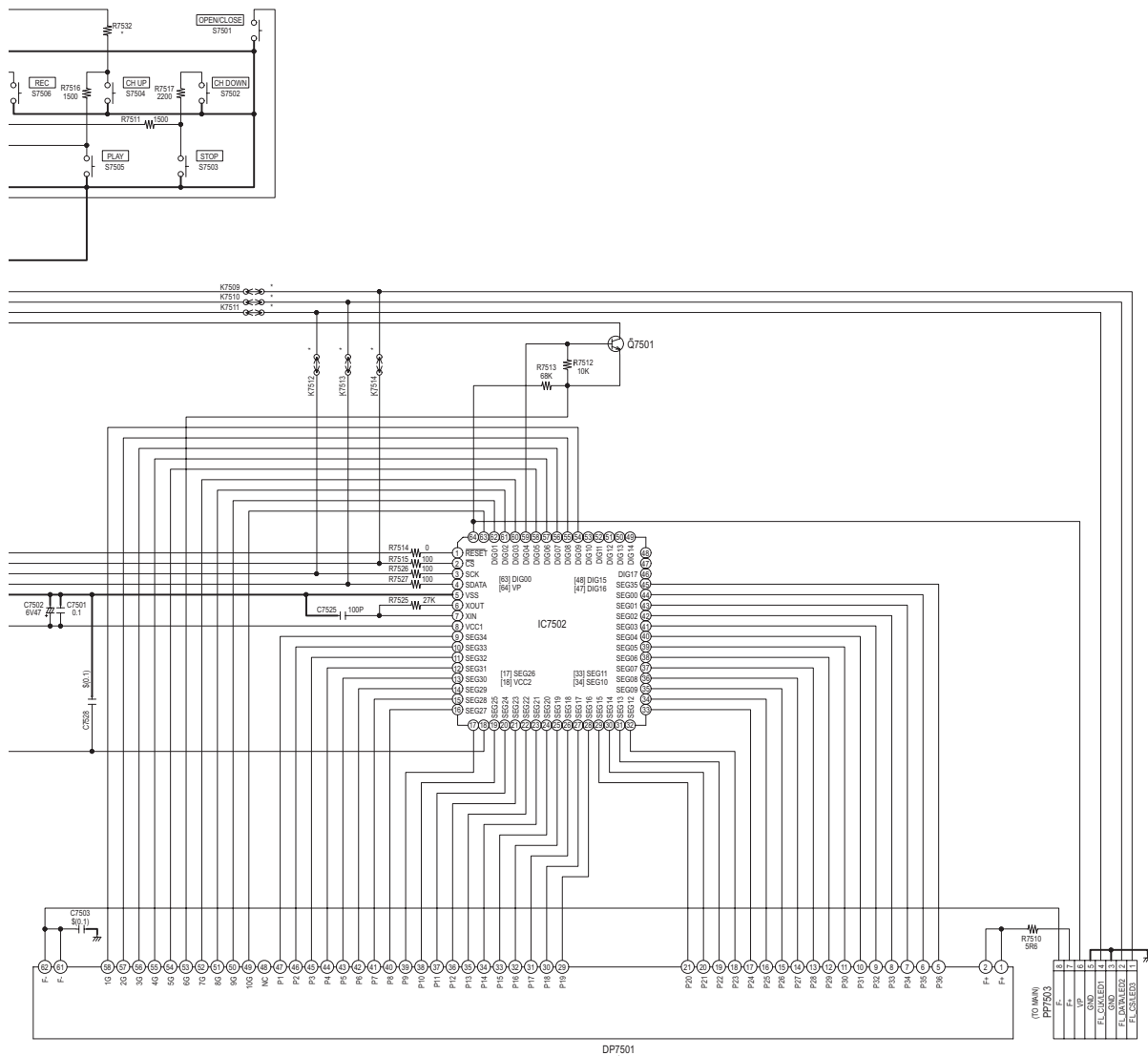


DMR-EH80VEG
DMR-EH80VEB
FRONT JACK
SCHEMATIC DIAGRAM



24.10. FL DRIVE





DMR-EH80VEG
DMR-EH80VEB
FL DRIVE
SCHEMATIC DIAGRAM

G

F

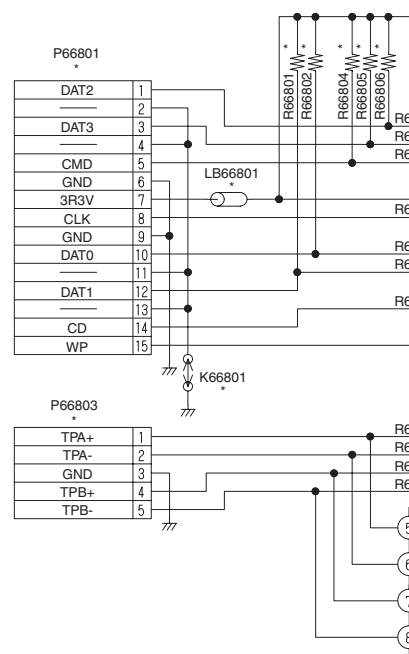
E

D

C

B

A



Note:
Marked \$ (spare) parts are not assembled

1

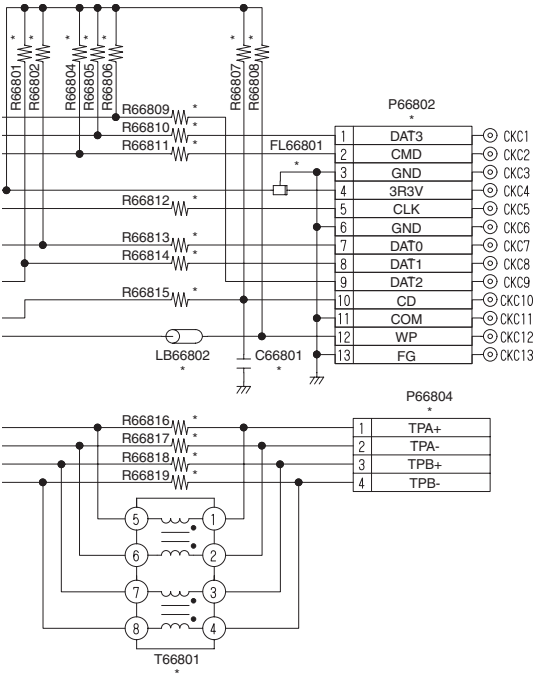
2

3

4

5

86

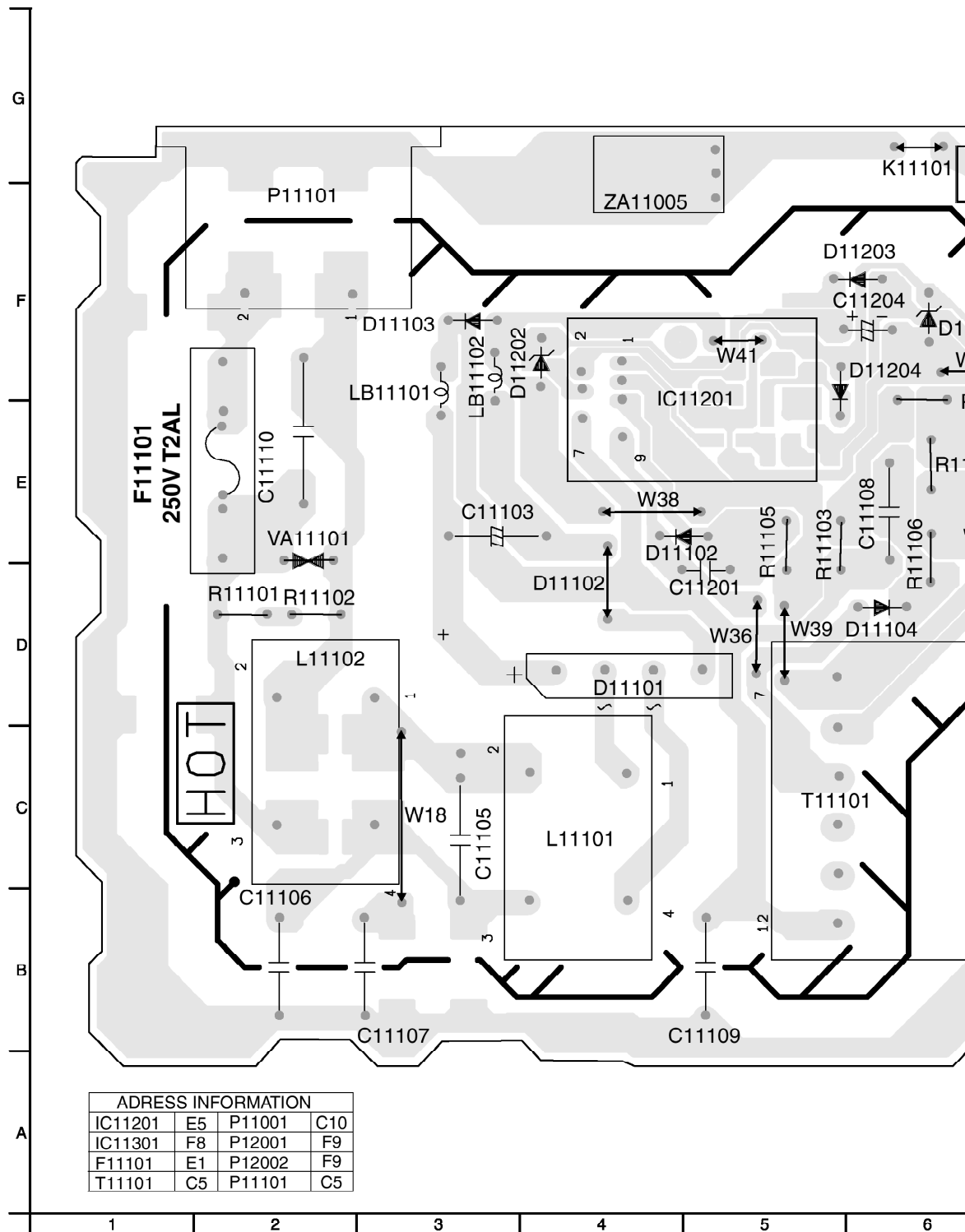


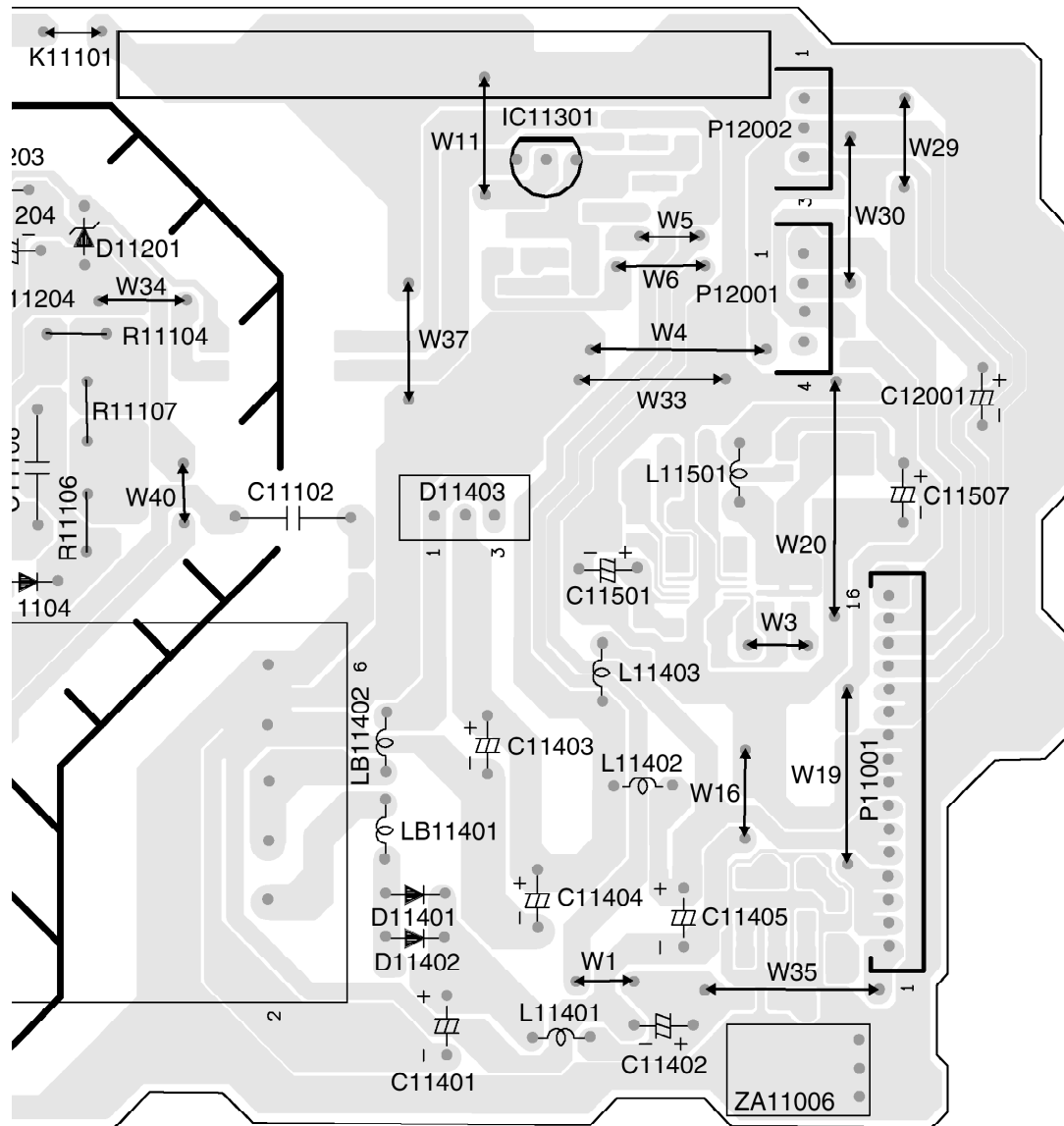
DMR-EH80VEG
DMR-EH80VEB
SD CARD / DV IN
SCHEMATIC DIAGRAM

28.3. POWER P.C.B. FOR PRINTING A4 SIZE

25 PRINTED CIRCUIT BOARD

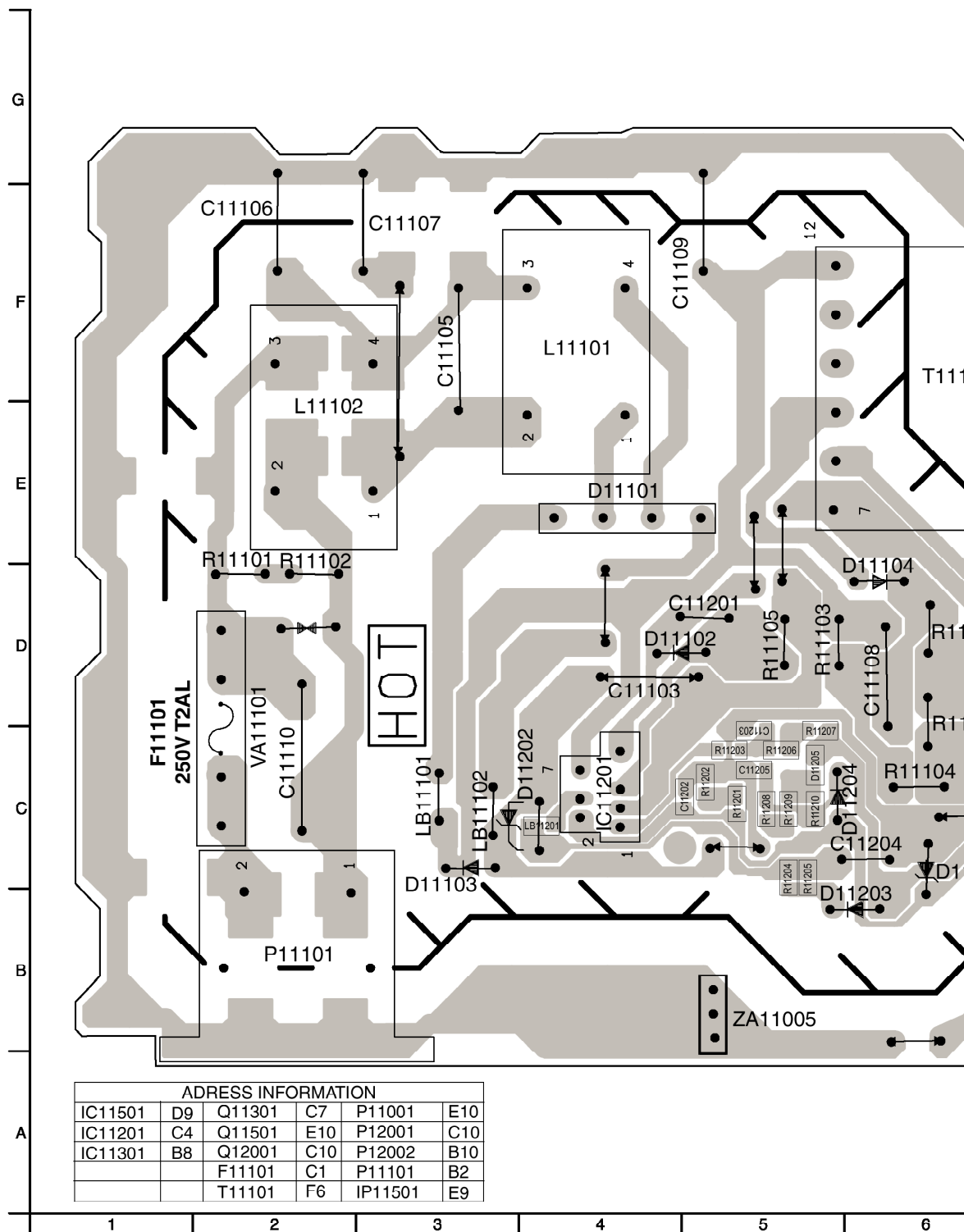
25.1. POWER P.C.B. (COMPONENT SIDE)





DMR-EH80VEG
DMR-EH80VEB
POWER P.C.B.
COMPONENT SIDE
VEP01977

25.2. POWER P.C.B. (SOLDER SIDE)



A horizontal number line with tick marks at 6, 7, 8, 9, 10, and 11. A red dashed vertical line is drawn at the position of 88, which is between 6 and 7.

25.3. MAIN P.C.B. (COMPONENT SIDE)





DMR-EH80VEG:
VEP06F87D
DMR-ES30VEB:
VEP06F87C
MAIN PCB
COMPONENT SIDE

25.4. MAIN P.C.B. (SOLDER SIDE)

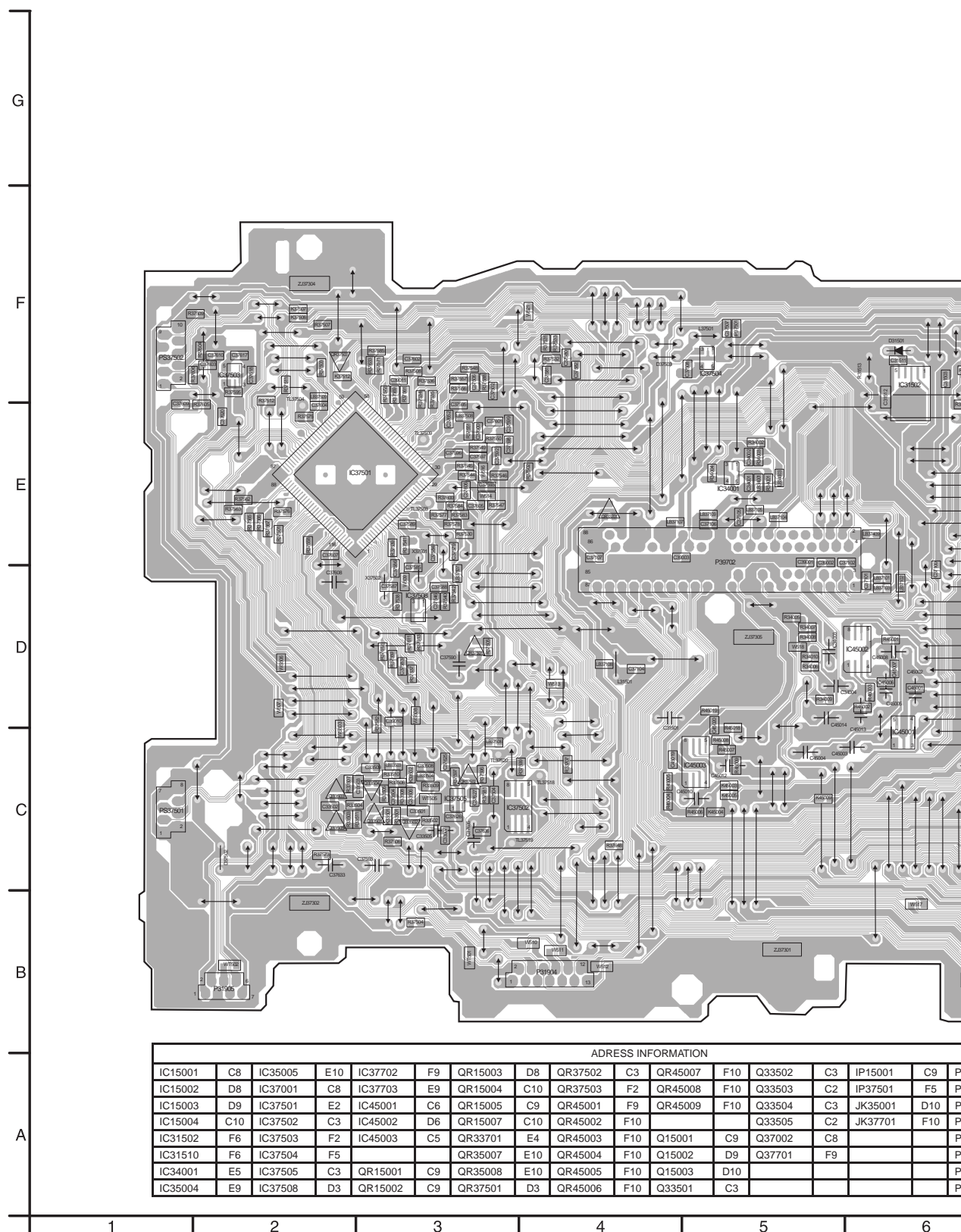




DMR-EH80VEG:
VEP06F87C
DMR-ES30VEB:
VEP06F87D
MAIN PCB
SOLDER SIDE

28.6. OTHER P.C.B.'s FOR PRINTING A4 SIZE

25.6. DIGITAL I/F P.C.B. (SOLDER SIDE)



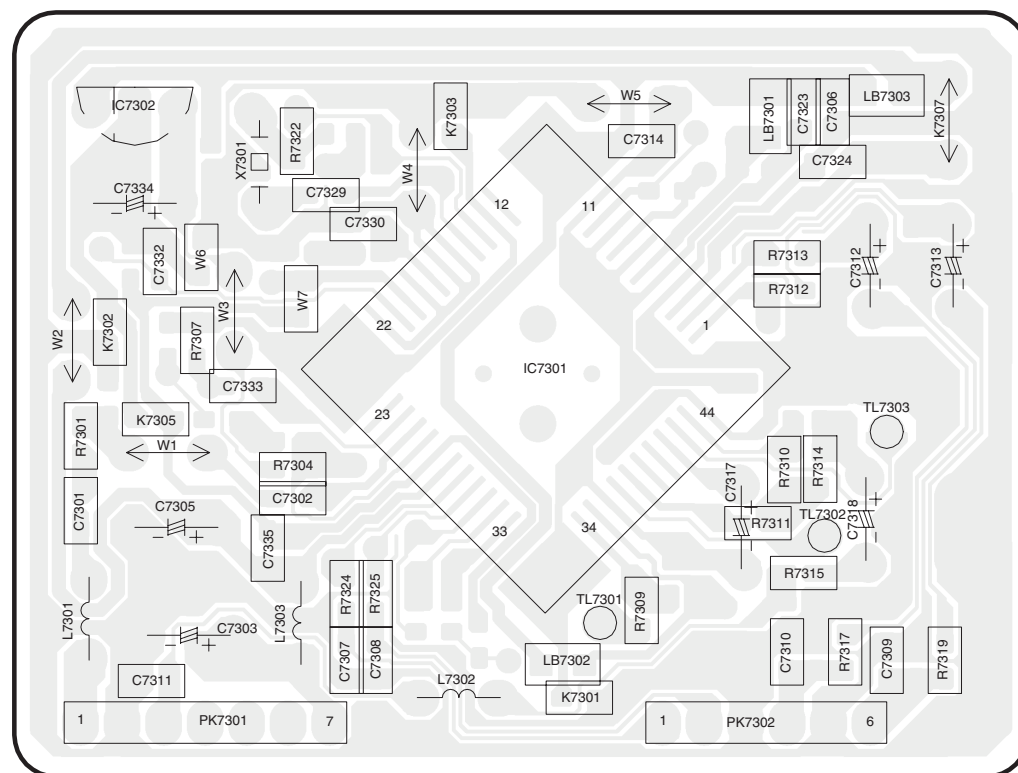


| | | | | | |
|---|---|---|---|----|----|
| 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|----|----|

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25.7. NICAM DECODER P.C.B. (VEP07A51A / VEP07A51B)

Nicam Decoder P.C.B. (VEP07A51A)

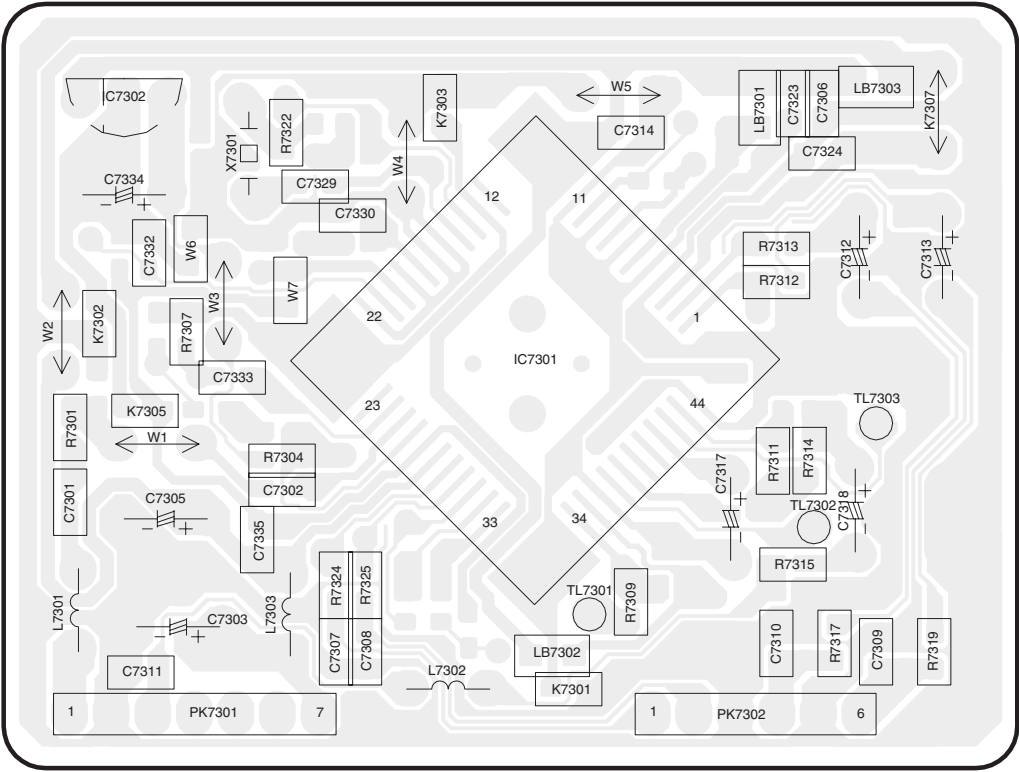


| VEP07A51A | |
|-----------|----|
| IC7301 | D3 |
| IC7302 | F1 |
| PK7301 | C2 |
| PK7302 | C4 |
| TL7301 | D3 |
| TL7302 | C5 |
| TL7303 | D5 |
| X7301 | E2 |

ADDRESS INFORMATION

DMR-EH80VEB
NICAM DECODER PCB
COMPONENT SIDE

Nicam Decoder P.C.B. (VEP07A51B)



| VEP07A51B | |
|---------------------|-----|
| IC7301 | D9 |
| IC7302 | F7 |
| PK7301 | C8 |
| PK7302 | C10 |
| TL7301 | D9 |
| TL7302 | C10 |
| TL7303 | D11 |
| X7301 | E8 |
| ADDRESS INFORMATION | |

DMR-EH80VEB
NICAM DECODER PCB
COMPONENT SIDE

G
F
E
D
C
B
A

Nicam Decoder P.C.B. (VEP07A51F)

| VEP07A51F | |
|-----------|----|
| IC7301 | D3 |
| IC7302 | F1 |
| PK7301 | C2 |
| PK7302 | C4 |
| TL7301 | D3 |
| TL7302 | C5 |
| TL7303 | D5 |
| X7301 | E2 |

ADDRESS INFORMATION

1 2 3 4 5 6

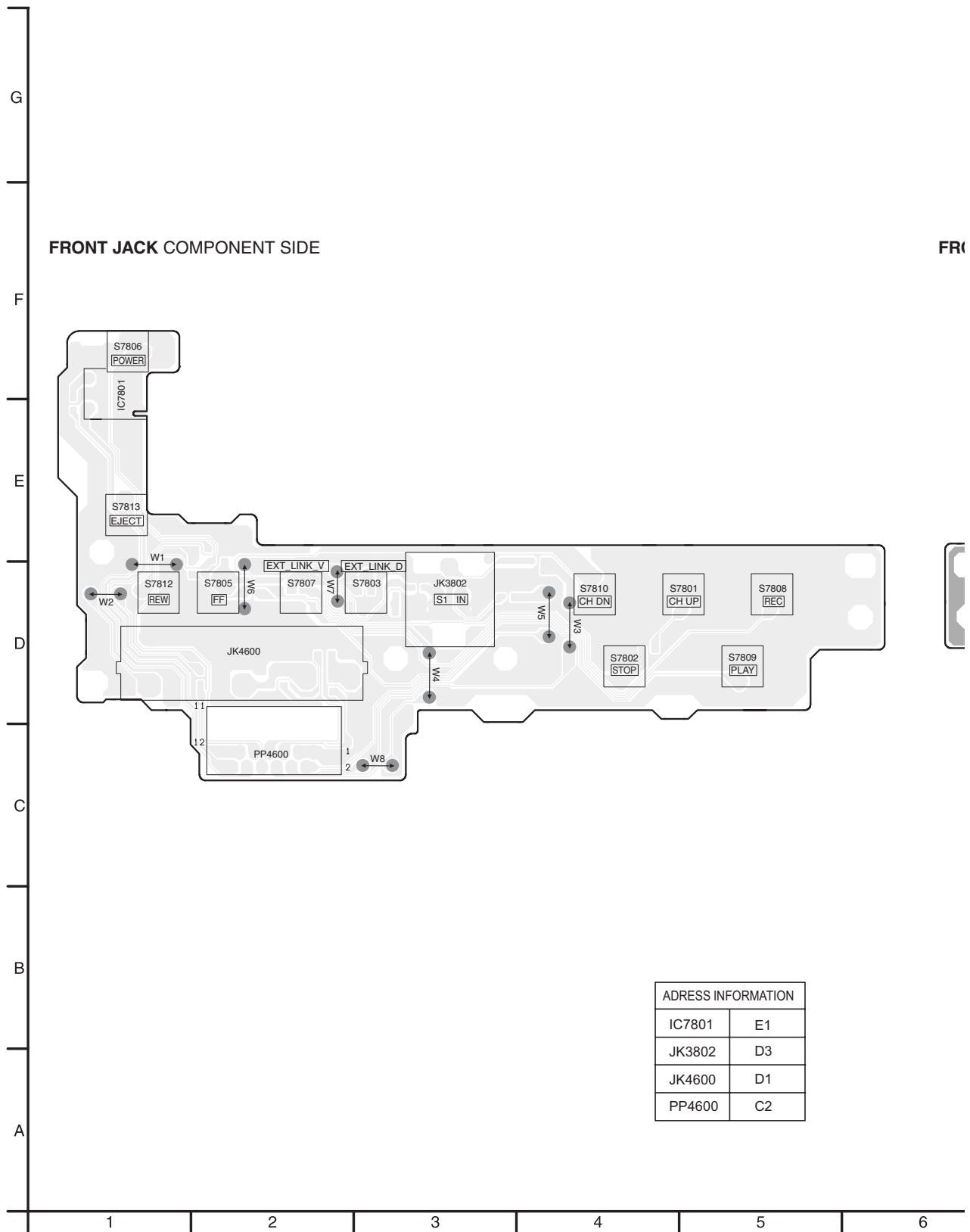


DMR-EH80VEG
NICAM DECODER PCB
COMPONENT SIDE

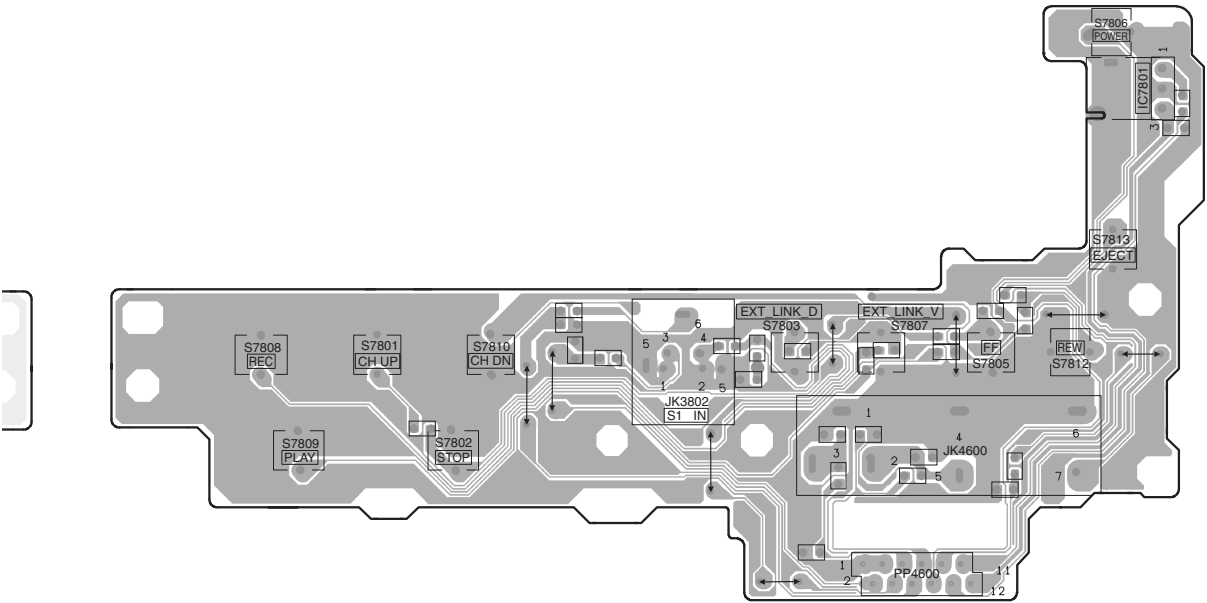


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25.9. FRONT JACK P.C.B.



FRONT JACK SOLDER SIDE



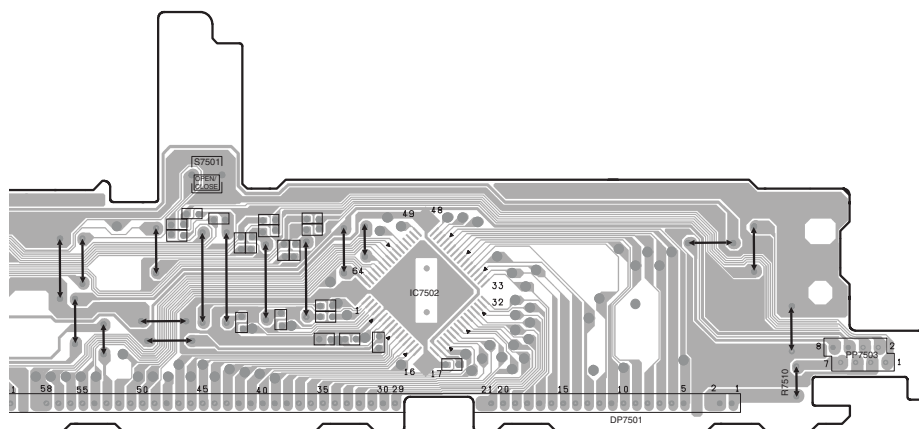
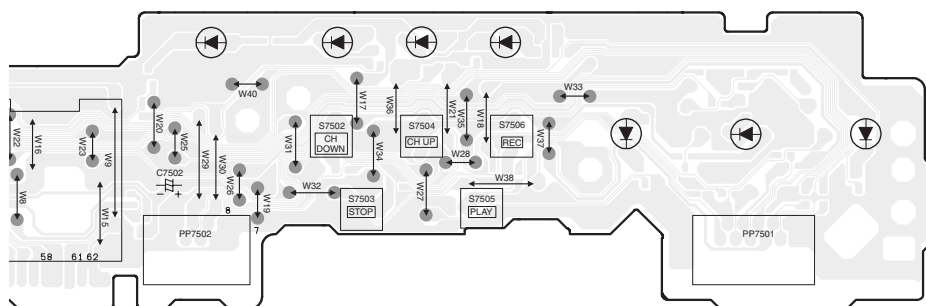
| ADDRESS INFORMATION | |
|---------------------|-----|
| IC7801 | E11 |
| JK3802 | D9 |
| JK4600 | D9 |
| PP4600 | C10 |

DMR-EH80VEG
DMR-EH80VEB
FRONT JACK PCB
COMPONENT SIDE / SOLDER SIDE
VEP04885C-L

A vertical number line with tick marks labeled A, B, C, D, E, F, and G from bottom to top.

FL DRIVE SOLDER SIDE

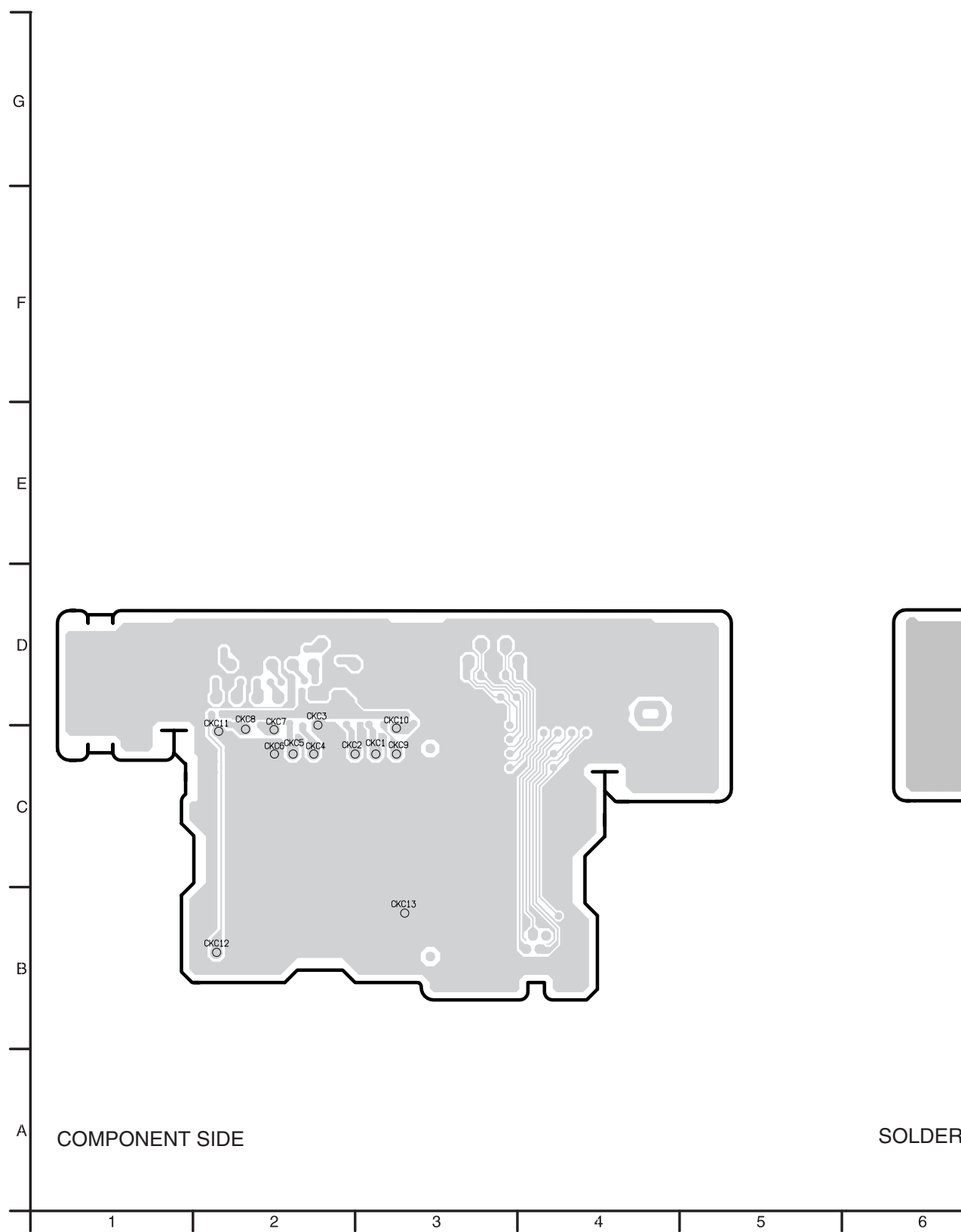
| ADDRESS INFORMATION | | | |
|---------------------|--------|--------|----|
| IC7502 | D8/F4 | QR7501 | D3 |
| DP7501 | C6/F3 | QR7502 | D3 |
| PP7501 | C2/F9 | QR7503 | D4 |
| PP7502 | C5/F6 | QR7504 | D4 |
| PP7503 | C10/F2 | QR7505 | D4 |
| Q7501 | C5 | QR7506 | D5 |
| | | QR7508 | D2 |



DMR-EH80VEG
DMR-EH80VEB
FL DRIVE PCB
COMPONENT SIDE / SOLDER SIDE
VEP07A78F



25.11. SD CARD P.C.B.





DMR-EH80VEG
DMR-EH80VEB
DIGITAL P.C.B./DV-JACK P.C.B.
COMPONENT SIDE
VEP001J19B